Consolidated Financial Statements (In U.S. dollars)

CONSTELLATION SOFTWARE INC.

For the years ended December 31, 2017 and 2016



MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL REPORTING

December 31, 2017

The accompanying consolidated financial statements of Constellation Software Inc. ("Constellation") and its subsidiaries and all the information in Management's Discussion and Analysis are the responsibility of management and have been approved by the Board of Directors.

The consolidated financial statements have been prepared by management in accordance with International Financial Reporting Standards ("IFRS"). The consolidated financial statements include certain amounts that are based on the best estimates and judgements of management and in their opinion present fairly, in all material respects, Constellation's financial position, results of operations and cash flows, in accordance with IFRS. Management has prepared the financial information presented elsewhere in the Management's Discussion and Analysis and has ensured that it is consistent with the consolidated financial statements, or has provided reconciliations where inconsistencies exist.

Management of Constellation has developed and maintains a system of internal controls, which is supported by the internal audit function. Management believes the internal controls provide reasonable assurance that material transactions are properly authorized and recorded, financial records are reliable and form a basis for the preparation of consolidated financial statements and that Constellation's material assets are properly accounted for and safeguarded.

The Board of Directors carries out its responsibility for the consolidated financial statements principally through its Audit Committee. This committee meets with management and the Company's independent auditors to review the Company's reported financial performance and to discuss audit, internal controls, accounting policies, and financial reporting matters. The consolidated financial statements were reviewed by the Audit Committee and approved by the Board of Directors.

The consolidated financial statements have been audited by KPMG LLP, the external auditors, in accordance with Canadian generally accepted auditing standards on behalf of the shareholders. KPMG LLP has full and free access to the Audit Committee.

February 14, 2018

"Mark Leonard" "Jamal Baksh"

President Chief Financial Officer



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INDEPENDENT AUDITORS' REPORT

To the Shareholders of Constellation Software Inc.

We have audited the accompanying consolidated financial statements of Constellation Software Inc., which comprise the consolidated statements of financial position as at December 31, 2017 and December 31, 2016, the consolidated statements of income, comprehensive income, changes in equity and cash flows for the years then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of Constellation Software Inc. as at December 31, 2017 and December 31, 2016, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards.

Chartered Professional Accountants, Licensed Public Accountants

February 14, 2018

KPMG LLP

Toronto, Canada

Consolidated Statements of Financial Position (In thousands of U.S. dollars)

	Dece	ember 31, 2017	De	ecember 31, 2016
Assets	2000	, , , , , , , , , , , , , , , , , , ,		500111501 01, 2010
Current assets:				
Cash	\$	488,964	Ś	353,499
Equity securities available-for-sale (note 5)	Ψ	-	Υ	4,236
Accounts receivable, net		316,538		243,554
Work in progress		64,109		56,541
Inventories (note 6)		23,196		19,667
Other assets (note 7)		100,098		96,181
		992,905		773,678
Non-current assets:				
Property and equipment (note 8)		53,817		46,395
Deferred income taxes (note 15)		38,362		49,863
Other assets (note 7)		21,801		19,782
Intangible assets (note 9)		1,181,333		993,743
mangible accept (note o)		1,295,313		1,109,783
Total assets	\$	2,288,218	\$	1,883,461
Liabilities and Shareholders' Equity				
Current liabilities:				
CSI Facility (note 10)	\$	_	\$	-
New CNH Facility (note 10)	•	96,398	•	-
CNH Facility (note 10)		, -		7,361
TSS Membership Liability (note 12)		49,215		26,435
Accounts payable and accrued liabilities		379,573		291,697
Dividends payable (note 16)		21,575		21,051
Deferred revenue		541,108		460,975
Provisions (note 13)		10,377		7,955
Acquisition holdback payables		42,867		17,056
Income taxes payable (note 14)		31,028 1,172,141		40,634
ALAP LPPC		1,1/2,141		873,164
Non-current liabilities:				445.226
CNH Facility (note 10)		- 0.C E.7.E		115,336
TSS Membership Liability (note 12)		86,575		46,502 223,870
Debentures (note 11) Deferred income taxes (note 15)		236,462 148,961		129,585
Acquisition holdback payables		6,480		855
Other liabilities (note 7)		33,521		36,640
		511,999		552,788
Total liabilities		1,684,140		1,425,952
		•		· · ·
Shareholders' equity (note 16):				
Capital stock		99,283		99,283
Accumulated other comprehensive income (loss)		(26,739)		(36,108)
Retained earnings		531,534 604,078		394,334 457,509
Subsequent events (notes 16 and 28)				
Total liabilities and shareholders' equity	\$	2,288,218	\$	1,883,461

Consolidated Statements of Income (In thousands of U.S. dollars, except per share amounts)

		Years ended	nber 31,	
		2017		2016
D ((47)				
Revenue (note 17)	•	470.004	Φ.	440.504
License	\$	170,384	\$	142,534
Professional services		498,195		434,488
Hardware and other		167,636		147,749
Maintenance and other recurring		1,643,206 2,479,421		1,400,315 2,125,086
		2,470,421		2,120,000
Expenses				
Staff		1,236,874		1,058,989
Hardware		92,666		82,304
Third party license, maintenance and professional services		212,604		192,703
Occupancy		58,885		51,696
Travel		73,632		61,745
Telecommunications		21,949		21,674
Supplies		16,120		9,820
Software and equipment		42,936		36,547
Professional fees		31,311		28,249
Other, net		48,644		28,963
Depreciation		22,576		22,376
Amortization of intangible assets		230,494		190,574
		2,088,691		1,785,640
Foreign exchange loss (gain)		8,611		25,990
TSS membership liability revaluation charge (note 12)		49,912		21,635
Share in net (income) loss of equity investee (note 7)		(369)		(5,317
Finance and other expense (income) (note 18)		(3,176)		(10,834
Bargain purchase gain (note 4)		(9,918)		-
Finance costs (note 18)		24,788		21,573
		69,848		53,047
Income before income taxes		320,882		286,399
Current income tax expense (recovery)		106,476		84,943
Deferred income tax expense (recovery)		(7,562)		(5,328
Income tax expense (recovery) (note 14 and 15)		98,914		79,615
Net income		221,968		206,784
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Earnings per share				
Basic and diluted (note 19)	\$	10.47	\$	9.76

Consolidated Statements of Comprehensive Income (In thousands of U.S. dollars, except per share amounts)

	Years ended [)ecem	ecember 31,		
	2017		2016		
Net income	\$ 221,968	\$	206,784		
Items that are or may be reclassified subsequently to net income:					
Net change in fair value					
of available-for-sale financial					
asset during the period	(1,314)		5,224		
Net change in fair value					
of derivatives designated as hedges					
during the period	538		468		
Amounts reclassified to profit during the period					
related to realized losses (gains) on					
available-for-sale financial assets	1,288		(5,204)		
Foreign currency translation differences from foreign operations	9,009		(2,134)		
Deferred income tax recovery (expense)	(152)		(143)		
Other comprehensive (loss) income for the period, net of income tax	9,369		(1,789)		
Total comprehensive income (loss) for the period	\$ 231,337	\$	204,995		

Consolidated Statements of Changes in Equity (In thousands of U.S. dollars)

Year ended December 31, 2017	Capital stock	stock Accumulated other comprehensive income/(loss)		Total accumulated other comprehensive income/(loss)	Retained earnings	Total	
		Cumulative translation account		Amounts related to gains/(losses) on derivatives designed as hedges			
Balance at January 1, 2017	\$ 99,283	\$ (35,748)	\$ 17	\$ (377)	\$ (36,108)	\$ 394,334	\$ 457,509
Total comprehensive income for the period:							
Net income	-	-	-	-	-	221,968	221,968
Other comprehensive income (loss)							
Net change in fair value of available-for-sale financial asset during the period	_	_	(1,314)	_	(1,314)	_	(1,314)
Net change in fair value			(1,01-1)		(1,514)		(1,014)
of derivatives designated as hedges							
during the period	-	-	-	538	538	-	538
Amounts reclassified to profit during the period related to realized losses (gains) on available-for-sale financial assets	-	-	1,288	-	1,288	-	1,288
Foreign currency translation differences from							
foreign operations	-	9,009	-	-	9,009	-	9,009
Deferred tax recovery (expense)	-	-	9	(161)	(152)	-	(152)
Total other comprehensive income (loss)							
for the period	-	9,009	(17)	377	9,369	-	9,369
Total comprehensive income (loss) for the period	-	9,009	(17)	377	9,369	221,968	231,337
Transactions with owners, recorded directly in equity Dividends to shareholders of the Company (note 16)	-	-	-	-	-	(84,768)	(84,768)
Balance at December 31, 2017	\$ 99,283	\$ (26,739)	\$ -	\$ -	\$ (26,739)	\$ 531,534	\$ 604,078

Consolidated Statements of Changes in Equity (In thousands of U.S. dollars)

Year ended December 31, 2016							
	Capital stock		ed other com income/(loss)		Total accumulated other comprehensive income/(loss)	Retained earnings	Total
		Cumulative translation account		Amounts related to gains/(losses) on derivatives designed as hedges			
Balance at January 1, 2016	\$ 99,283	\$ (33,614)	\$ -	\$ (705)	\$ (34,319)	\$ 272,318	\$ 337,282
Total comprehensive income for the period:							
Net income	-	-	-	-	-	206,784	206,784
Other comprehensive income (loss)							
Net change in fair value of available-for-sale financial asset during the period	-	-	5,224	-	5,224	-	5,224
Net change in fair value of derivatives designated as hedges during the period	-	-	-	468	468	-	468
Amounts reclassified to profit during the period related to realized losses (gains) on available-for-sale financial assets	-	-	(5,204)	-	(5,204)	-	(5,204)
Foreign currency translation differences from foreign operations	-	(2,134)	-	-	(2,134)	-	(2,134)
Deferred tax recovery (expense)	-	-	(3)	(140)	(143)	-	(143)
Total other comprehensive income for the period	-	(2,134)	17	328	(1,789)	-	(1,789)
Total comprehensive income for the period	-	(2,134)	17	328	(1,789)	206,784	204,995
Transactions with owners, recorded directly in equity Dividends to shareholders of the Company (note 16)	-	-		-	-	(84,768)	(84,768)
Balance at December 31, 2016	\$ 99,283	\$ (35,748)	\$ 17	\$ (377)	\$ (36,108)	\$ 394,334	\$ 457,509

Consolidated Statements of Cash Flows (In thousands of U.S. dollars)

	Years ended Dec	ember 31,
	2017	2016
Cash flows from operating activities:		
Net income	\$ 221,968	\$ 206,784
Adjustments for:		
Depreciation	22,576	22,376
Amortization of intangible assets	230,494	190,574
TSS membership liability revaluation charge	49,912	21,635
Share in net (income) loss of equity investee	(369)	(5,317)
Finance and other expense (income)	(3,176)	(10,834)
Bargain purchase gain	(9,918)	-
Finance costs	24,788	21,573
Income tax expense (recovery)	98,914	79,615
Foreign exchange loss (gain)	8,611	25,990
Change in non-cash operating working capital		
exclusive of effects of business combinations (note 26)	(15,149)	(16,496)
Income taxes paid	(100,894)	(45,019)
Net cash flows from operating activities	527,757	490,881
Cash flows from (used in) financing activities:		
Interest paid	(22,144)	(22,867)
Increase (decrease) in New CNH Facility, net	94,846	(22,007)
Repayments of CNH facility	(138,177)	(8,709)
Credit facility transaction costs	(2,450)	(1,212)
Dividends paid	(84,768)	(84,768)
Net cash flows from (used in) in financing activities	(152,693)	(117,556)
Cash flows from (used in) investing activities:		
Acquisition of businesses, net of cash		
acquired (note 4)	(225,147)	(152,310)
Post-acquisition settlement payments, net of receipts	(30,866)	(25,791)
Purchases of available-for-sale equity securities	-	(27,707)
Proceeds from sale of available-for-sale equity securities	2,828	28,491
Interest, dividends and other proceeds received (note 7)	22,993	1,729
Property and equipment purchased	(19,711)	(19,098)
Net cash flows from (used in) investing activities	(249,903)	(194,686)
Effect of foreign currency on		
cash and cash equivalents	10,304	(3,611)
Increase (decrease) in cash and cash equivalents	135,465	175,028
Cash, beginning of period	353,499	178,471
Cash, end of period	\$ 488,964	\$ 353,499

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

Notes to the consolidated financial statements

1.	Reporting entity	15.	Deferred tax assets and liabilities
2.	Basis of presentation	16.	Capital and other components of equity
3.	Significant accounting policies	17.	Revenue
4.	Business acquisitions	18.	Finance and other expense (income) and finance costs
5.	Equity securities available-for-sale	19.	Earnings per share
6.	Inventories	20.	Capital risk management
7.	Other assets and liabilities	21.	Financial risk management and financial instruments
8.	Property and equipment	22.	Operating leases
9.	Intangible assets and goodwill	23.	Operating segments
10.	CSI facility, New CNH facility, and CNH facility	24.	Contingencies
11.	Debentures	25.	Guarantees
12.	TSS membership liability	26.	Changes in non-cash operating working capital
13.	Provisions	27.	Related parties
14.	Income taxes	28.	Subsequent events

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

1. Reporting entity

Constellation Software Inc. ("Constellation") is a company domiciled in Canada. The address of Constellation's registered office is 20 Adelaide Street East, Suite 1200, Toronto, Ontario, Canada. The consolidated financial statements of Constellation as at and for the fiscal years ended December 31, 2017 and December 31, 2016 comprise Constellation and its subsidiaries (together referred to as the "Company") and the Company's interest in associates. The Company is engaged principally in the development, installation and customization of software relating to the markets listed below, and in the provision of related professional services and support.

Municipal systems

Public safety

School administration

Public Sector:

Public transit operators

Para transit operators

School transportation

Asset management
Fleet and facility management
District attorney

Non-emergency medical Taxi dispatch Healthcare Ride share Benefits administration Rental

Local government Insurance Electric utilities

Agri-business Collections management Court

Marine asset management Water utilities School and special library

Communications Credit unions Drink distribution

Higher education Financial services Notaries

Fashion retail Pharmacies Long-term care

Home and community care County systems Research management

Retail management and distribution Public housing authorities Not-for-profit organizations

Automotive Accountancy Catering

Private Sector:

Private clubs and daily fee golf courses Lease management Window manufacturers

Construction Winery management Cabinet manufacturers

Food services Buy here pay here dealers Made-to-order manufacturers
Health clubs RV and marine dealers Window and other dealers
Moving and storage Pulp and paper manufacturers Multi-carrier shipping

Metal service centers

Agriculture equipment dealers

Autractions

Outdoor equipment dealers

Leisure centers

Agriculture equipment dealers

Multi-channel distribution

Education

Wholesale distribution

Retail management and distribution Healthcare electronic medical records Homebuilders

Radiology and laboratory information Pharmaceutical and biotech Third party logistics warehouse

systems manufacturers management systems

Product licensing Event management Financial services

Tire distribution

Salons and spas

Association management

Housing finance agencies

Municipal treasury and debt systems

Public housing authorities

Tour operators Auto clubs Real estate brokers and agents Long-term care Textiles and apparel Home and community care

Hospitality Mining Ombudsman

Aerospace Design and welding Manufacturing plant performance
Oil and gas Publishing

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

2. Basis of presentation

(a) Statement of compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS), issued and outstanding as of February 14, 2018, the date the Board of Directors approved such financial statements.

(b) Basis of measurement

The consolidated financial statements have been prepared on the historical cost basis except for certain assets and liabilities initially recognized in connection with business combinations, and certain financial instruments and derivative financial instruments, which are measured at fair value.

(c) Functional and presentation currency

The consolidated financial statements are presented in U.S. dollars, which is Constellation's functional currency.

(d) Use of estimates and judgements

The preparation of the consolidated financial statements in conformity with IFRS requires management to make judgements, estimates and assumptions that affect the application of accounting policies and reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Estimates are based on historical experience and other assumptions that are considered reasonable in the circumstances. The actual amount or values may vary in certain instances from the assumptions and estimates made. Changes will be recorded, with corresponding effect in profit or loss, when, and if, better information is obtained.

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year are included in the following notes:

Note 3(k) - Revenue recognition

Note 3(a)(i) - Business combinations

Note 3(m) - Income taxes

Note 3(i) - Impairment

Note 3(d) - Intangible assets

Note 12 - TSS membership liability

Note 24 - Contingencies

Critical judgements that management has made in the process of applying accounting policies disclosed herein and that have a significant effect on the amounts recognized in the consolidated financial statements relate to the (i) determination of functional currencies for Constellation's subsidiaries and, most notably, in respect of businesses acquired during the period; (ii) assessment as to whether certain customer contract obligations and deliverables related to multiple-element arrangements have stand-alone value to the customer; (iii) recognition of deferred tax assets; and (iv) recognition of provisions.

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

- Functional currency management applies judgement in situations where primary and secondary indicators are mixed. Primary indicators such as the currency that mainly influence sales prices are given priority before considering secondary indicators.
- Revenue recognition and separation of customer contract obligations and deliverables management applies judgement when assessing whether certain deliverables in a customer arrangement should be included or excluded from the unit of account to which contract accounting is applied. The judgement is typically related to the sale and inclusion of third party hardware, professional services and licenses in a customer arrangement and involves an assessment that principally addresses whether the deliverable has stand-alone value to the customer that is not dependent upon other components of the arrangement.
- Deferred tax assets the recognition of deferred tax assets is based on forecasts of future taxable profit.
 The measurement of future taxable profit for the purposes of determining whether or not to recognize deferred tax assets depends on many factors, including the Company's ability to generate such profits and the implementation of effective tax planning strategies. The occurrence or non-occurrence of such events in the future may lead to significant changes in the measurement of deferred tax assets.
- Provisions in recognizing provisions, the Company evaluates the extent to which it is probable that it has
 incurred a legal or constructive obligation in respect of past events and the probability that there will be an
 outflow of benefits as a result. The judgements used to recognize provisions are based on currently known
 factors which may vary over time, resulting in changes in the measurement of recorded amounts as
 compared to initial estimates.

3. Significant accounting policies

The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements unless otherwise indicated.

The significant accounting policies have been applied consistently by the Company's subsidiaries.

(a) Basis of consolidation

(i) Business combinations

Acquisitions have been accounted for using the acquisition method required by IFRS 3 Business Combinations. Goodwill arising on acquisitions is measured as the fair value of the consideration transferred including the recognized amount of any non-controlling interest in the acquiree, if any, less the net recognized amount of the estimated fair value of identifiable assets acquired and liabilities assumed (subject to certain exemptions to fair value measurement principles such as deferred tax assets or liabilities), all measured as of the acquisition date. When the consideration transferred is less than the estimated fair value of assets acquired and liabilities assumed, a bargain purchase gain is recognized immediately in the consolidated statements of income. Transaction costs that the Company incurs in connection with a business combination are expensed as incurred.

The Company uses its best estimates and assumptions to reasonably value assets and liabilities assumed at the acquisition date as well as contingent consideration, where applicable, and these estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, the Company may record adjustments to the assets acquired and liabilities assumed with a corresponding offset to goodwill. Upon conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to profit or loss. For a given acquisition, the Company may identify certain pre-acquisition contingencies as of the acquisition

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

date and may extend its review and evaluation of these pre-acquisition contingencies throughout the measurement period in order to obtain sufficient information to assess these contingencies as part of acquisition accounting, as applicable.

(ii) Consolidation methods

Entities over which the Company has control are fully consolidated from the date that control commences until the date that control ceases. Entities over which the Company has significant influence (investments in "associates") are accounted for under the equity method. Significant influence is assumed when the Company's interests are 20% or more, unless qualitative factors overcome this assumption.

Associates are those entities in which the Company has significant influence, but not control, over the financial and operating policies. Investments in associates are recognized initially at cost, inclusive of transaction costs. The Company's investment includes goodwill identified on acquisition, net of any accumulated impairment losses. The consolidated financial statements include the Company's share of the income and expenses and equity changes of equity accounted investees, from the date that significant influence commences until the date that significant influence ceases.

(iii) Transactions eliminated on consolidation

Intra-company balances and transactions, and any unrealized income and expenses arising from intra-company transactions, are eliminated in preparing the consolidated financial statements.

(b) Foreign currency translation

(i) Foreign currency transactions

Transactions in foreign currencies are translated to the respective functional currencies of subsidiaries of the Company at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are re-measured to the functional currency at the exchange rate at that date. Foreign currency differences arising on re-measurement are recognized through profit or loss, except for differences arising on the retranslation of available-for-sale equity instruments, which are recognized in other comprehensive income. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Foreign currency gains and losses are reported in profit and loss on a net basis. The effect of currency translation adjustments on cash and cash equivalents is presented separately in the statements of cash flows and separated from investing and financing activities when deemed significant.

(ii) Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated to U.S. dollars at exchange rates at the reporting date. The income and expenses of foreign operations are translated to U.S. dollars using average exchange rates for the month during which the transactions occurred. Foreign currency differences are recognized in other comprehensive income in the cumulative translation account; however, if the operation is a non-wholly owned subsidiary, then the relevant proportionate share of the translation difference is allocated to the non-controlling interest when applicable.

Foreign exchange gains or losses arising from a monetary item receivable from or payable to a foreign operation, the settlement of which is neither planned nor likely to occur in the foreseeable future and which its substance is considered to form part of the net investment in the foreign operation, are recognized in other comprehensive

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

income in the cumulative amount of foreign currency translation differences. If, and when, settlement plans change or deemed likely to occur, then the accounting process in (b)(i) above is applied. When a foreign operation payable or receivable classified as a net investment is partially or fully disposed, the proportionate share of the cumulative amount in the translation reserve related to that foreign operation is transferred to profit or loss as part of the profit or loss on disposal. The Company has elected not to treat repayments of monetary items receivable or payable to a foreign operation as a disposition.

(c) Financial Instruments

The Company's financial instruments comprise cash, equity securities, accounts receivable, derivatives in the form of cash flow hedges, bank indebtedness, New CNH facility, CNH facility, debentures, Total Specific Solutions B.V. ("TSS") membership liability, accounts payable and accrued liabilities, dividends payable, income taxes payable and holdback liabilities on acquisitions.

Financial assets are recognized in the consolidated statement of financial position if we have a contractual right to receive cash or other financial assets from another entity. Financial assets, including accounts receivable, are derecognized when the rights to receive cash flows from the investments have expired or were transferred to another party and the Company has transferred substantially all risks and rewards of ownership.

All financial liabilities are recognized initially on the date at which the Company becomes a party to the contractual provisions of the instrument. The Company derecognizes a financial liability when its contractual obligations are discharged, cancelled or expire.

Financial assets and liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Company has a legal right to offset the amounts and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

(i) Non-derivative financial assets

Non-derivative financial assets are classified in the following categories at the time of initial recognition based on the purpose for which the financial assets were acquired:

Available-for-sale financial assets

Available-for-sale financial assets are non-derivative financial assets that are designated as available-for-sale and that are not classified within loans and receivables or financial assets at fair value through profit or loss. The Company's investments in equity securities are classified as available-for-sale financial assets and are recognized initially at fair value inclusive of any directly attributable transaction costs. Subsequent to initial recognition, they are measured at fair value and changes therein, other than impairment losses which are recognized in profit or loss, are recognized in other comprehensive income and presented within shareholders' equity. When an investment is disposed of and derecognized, the cumulative gain or loss in other comprehensive income is transferred to profit or loss for the period.

The fair value of the available-for-sale financial assets is determined by reference to their quoted closing bid price at the reporting date.

Loans and receivables

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

Loans and receivables, which comprise accounts receivable, are financial assets with fixed or determinable payments that are not quoted in an active market. Such assets are recognized initially at fair value inclusive of any directly attributable transaction costs and subsequently carried at amortized cost using the effective interest method, less any impairment losses. They are included in current assets, except for those with maturities greater than 12 months after the balance sheet date, which are classified as non-current assets.

(ii) Non-derivative financial liabilities

Financial liabilities include the CSI facility, New CNH facility, CNH facility, TSS membership liability, debentures, accounts payable and accrued liabilities, dividends payable, income taxes payable and holdbacks on acquisitions. Financial liabilities are generally recognized initially at fair value, typically being transaction price, plus any directly attributable transaction costs and subsequently measured at amortized cost using the effective interest method. The Company derecognizes a financial liability when its contractual obligations are discharged, cancelled, or expired.

(iii) Capital Stock

Common shares are classified as equity. Incremental costs directly attributable to the issue of common shares are recognized as a deduction from equity, net of tax.

(iv) Derivatives

The Company's derivatives are carried at fair value and are reported as assets when they have a positive fair value and as liabilities when they have a negative fair value.

Changes in the fair values of derivative financial instruments are reported in the consolidated statements of income, except for cash flow hedges that meet the conditions for hedge accounting. The portion of the gain or loss on the hedging instruments that are determined to be an effective hedge are recognized directly in other comprehensive income, and the ineffective portion in the consolidated statements of income. The gains or losses deferred in other comprehensive income in this way are subsequently recognized in the consolidated statements of income in the same period in which the hedged underlying transaction or firm commitment is recognized in the statement of income. In order to qualify for hedge accounting, the Company is required to document in advance the relationship between the item being hedged and the hedging instrument. The Company is also required to document and demonstrate an assessment of the relationship between the hedged item and the hedging instrument, which shows that the hedge will be highly effective on an ongoing basis. This effectiveness testing is re-performed at the end of each reporting period to ensure that the hedge remains highly effective.

(d) Intangible assets

(i) Goodwill

Goodwill that arises upon the acquisition of subsidiaries is included in intangible assets. After initial recognition, goodwill is measured at cost less any accumulated impairment losses, with the carrying value being reviewed for impairment at least annually and whenever events or changes in circumstances indicate that the carrying value may be impaired. In respect of equity accounted investees, the carrying amount of goodwill is included in the carrying amount of the investment. No such losses relating to goodwill have been recognized during the year.

The impairment test methodology is based on a comparison between the higher of fair value less costs to sell and value-in-use of each of the Company's cash generating units ("CGU") and the net asset carrying values (including

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goodwill). Within the Company's reporting structure, business units generally reflect one level below the six operating segments (Volaris, Harris, Total Specific Solutions, Jonas, Perseus, and Vela Operating Groups). In determining the recoverable amount, the Company applies an estimated market valuation multiple to the business unit's most recent annual recurring revenues, which are derived from post-contract customer support revenues, transactional revenues, and hosted products revenues. Valuation multiples applied by management for this purpose reflect current market conditions specific to the business unit and are assessed for reasonability by comparison to the Company's current and past acquisition experience involving ranges of revenue-based multiples required to acquire representative software companies and the Company's overall revenue based-trading multiple. In addition, in certain instances, the recoverable amount is determined using a value-in-use approach which follows the same valuation process that is undertaken for the Company's business acquisitions. An impairment is recognized if the carrying amount of a CGU exceeds its estimated recoverable amount. The recoverable amount of goodwill is estimated annually on December 31 of each year or whenever events or changes in circumstances indicate that the carrying value may be impaired.

(ii) Acquired intangible assets

The Company uses the income approach to value acquired technology and customer relationship intangible assets. The income approach is a valuation technique that calculates the estimated fair value of an intangible asset based on the estimated future cash flows that the asset can be expected to generate over its remaining useful life.

The Company utilizes the discounted cash flow ("DCF") methodology which is a form of the income approach that begins with a forecast of the annual cash flows that a market participant would expect the subject intangible asset to generate over a discrete projection period. The forecasted cash flows for each of the years in the discrete projection period are then converted to their present value equivalent using a rate of return appropriate for the risk of achieving the intangible assets' projected cash flows, again, from a market participant perspective. The present value of the forecasted cash flows are then added to the present value of the residual value of the intangible asset (if any) at the end of the discrete projection period to arrive at a conclusion with respect to the estimated fair value of the subject intangible assets.

Specifically, the Company relies on the relief-from-royalty method to value the acquired technology and the multiple-period excess earnings ("MEEM") method to value customer relationship assets.

The underlying premise of the relief-from-royalty method is that the fair value of the technology is equal to the cost savings (or the "royalty avoided") resulting from the ownership of the asset by the avoidance of paying royalties to license the use of the technology from another owner. Accordingly the income forecast reflects an estimate of a fair royalty that a licensee would pay, on a percentage of revenue basis, to obtain a license to utilize the technology.

The MEEM method isolates the cash flows attributable to the subject asset by utilizing a forecast of expected cash flows less the returns attributable to other enabling assets, both tangible and intangible.

Other intangible assets that are acquired by the Company and have finite useful lives are measured at cost, being reflective of fair value, less accumulated amortization and impairment losses. Subsequent expenditures are capitalized only when it increases the future economic benefits that form part of the specific asset to which it relates and other criteria have been met. Otherwise all other expenditures are recognized in profit or loss as incurred.

Amortization is recognized in profit or loss on a straight-line basis over the estimated useful lives of intangible assets, other than goodwill, from the date that they are acquired and available for use, since this most closely reflects the expected usage and pattern of consumption of the future economic benefits embodied in the asset. To determine the useful life of the technology assets, the Company considers the length of time over which it expects

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to earn or recover the majority of the present value of the forecasted cash flows of the related intangible assets. The estimated useful lives for the current and comparative periods are as follows:

Technology assets2 to 12 yearsCustomer assets5 to 20 yearsTrademarks20 yearsBacklogUp to 1 yearNon-compete agreementsTerm of agreement

Amortization methods, useful lives and the residual values are reviewed at least annually (or when there has been an indication of impairment) and are adjusted as appropriate.

(iii) Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognized in profit or loss as an expense as incurred.

Expenditure on development activities, whereby research findings are applied to a plan or design for the production of new or substantially improved products and processes, is capitalized only if the product or process is technically and commercially feasible, if development costs can be measured reliably, if future economic benefits are probable, if the Company intends to use or sell the asset and the Company intends and has sufficient resources to complete development. To date, no material development expenditures have been capitalized.

For the year ended December 31, 2017, \$348,768 (2016 – \$294,735) of research and development costs have been expensed in profit or loss. These costs are net of estimated investment tax credits, recognized as part of other, net expenses through profit or loss of \$17,375 for the year ended December 31, 2017 (2016 – \$19,007).

(e) Property and equipment

(i) Recognition and measurement

Property and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. Cost includes initial and subsequent expenditures that are directly attributable to the acquisition of the related asset. When component parts of an item of property and equipment have different useful lives, they are accounted for as separate items (major components) of property and equipment, where applicable.

(ii) Depreciation

Depreciation is recognized in profit or loss on a straight-line basis over the estimated useful lives of each part of an item of property and equipment.

The estimated useful lives for the current and comparative periods are as follows:

AssetRateComputer hardware3-5 yearsComputer software1 yearFurniture and equipment5 years

Leasehold improvements Shorter of the estimated useful life and the term of the lease

Building 50 years

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Depreciation methods, useful lives and residual values are reviewed at each financial year end or more frequently as deemed relevant, and adjusted where appropriate.

(f) Inventories

Inventories are measured at the lower of cost and net realizable value. The cost of inventories is based on the first-in first-out principle, and includes expenditures incurred in acquiring the inventories, production and other costs incurred in bringing them to their existing location and condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overheads based on normal operating capacity. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

(g) Work in progress

Work in progress represents the gross unbilled amount expected to be collected from customers for contract work performed to date. It is measured at cost plus profit recognized to date less progress billings and recognized losses, if any.

Work in progress is presented in the statement of financial position for all contracts in which costs incurred plus recognized profits exceed progress billings. If progress billings exceed costs incurred plus recognized profits, then the excess is presented as deferred revenue in the statement of financial position.

(h) Other non-current liabilities

Other non-current liabilities consists principally of the non-current portion of lease incentives, non-compete obligations, certain acquired contract liabilities, deferred revenue, provisions and contingent consideration recognized in connection with business acquisitions to be settled in cash, which are discounted for measurement purposes.

(i) Impairment

(i) Financial assets (including receivables)

A financial asset not carried at fair value through profit or loss is assessed at each reporting date to determine whether there is objective evidence that it is impaired. A financial asset is impaired if objective evidence indicates that a loss event has occurred after the initial recognition of the asset, and that the loss event had a negative effect on the estimated future cash flows of that asset that can be estimated reliably.

Objective evidence that financial assets are impaired can include default or delinquency by a debtor, restructuring of an amount due to the Company on terms that the Company would not consider otherwise, or indications that a debtor or issuer will enter bankruptcy.

The Company considers evidence of impairment for receivables at both a specific and collective level. All individually significant receivables are assessed for specific impairment. All individually significant receivables found not to be specifically impaired, together with receivables that are not individually significant are collectively assessed for impairment by grouping together receivables with similar risk characteristics.

An impairment loss in respect of a financial asset measured at amortized cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the asset's

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original effective interest rate. Losses are recognized in profit or loss and reflected in an allowance account against receivables. When a subsequent event causes the amount of impairment loss to decrease, the decrease in impairment loss is reversed through profit or loss.

(ii) Non-financial assets

The carrying amounts of the Company's non-financial assets, other than inventories (which is addressed in note 3(f)) and deferred tax assets (which is addressed in note 3(m)), are reviewed at each reporting date (or more frequently if required) to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. For goodwill, the recoverable amount is estimated annually on December 31 of each fiscal year or whenever required.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. In assessing the value in use, the Company uses discounted cash flows which are determined using a pre-tax discount rate specific to the asset or CGU. The discount rate used reflects current market conditions including risks specific to the assets. Significant estimates within the cash flows include recurring revenue growth rates and operating expenses. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets, which for the Company's purposes is typically representative of the business unit level within the corporate and management structure. For the purposes of goodwill impairment testing, goodwill acquired in a business combination is allocated to the CGU, or the group of CGUs, that is expected to benefit from the synergies of the combination.

An impairment loss is recognized if the carrying amount of an asset or its CGU exceeds its estimated recoverable amount. Impairment losses are recognized in profit or loss. Impairment losses recognized in respect of CGUs are allocated first to reduce the carrying amount of any goodwill allocated to the CGU, and then to reduce the carrying amounts of the other assets (such as intangible assets and property and equipment) in the CGU (group of units) on a pro rata basis.

Goodwill that forms part of the carrying amount of an investment in an associate is not recognized separately and, therefore, is not tested for impairment separately. Instead, the entire amount of the investment in an associate is tested for impairment as a single asset when there is objective evidence that the investment in an associate may be impaired.

An impairment loss in respect of goodwill is not reversed. In respect of other non-financial assets, impairment losses recognized in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been previously recognized.

(j) Provisions

A provision is recognized if, as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are measured at the estimated future cash flows required to settle the present obligation, based on the most reliable evidence available at the reporting date. The estimated cash flows are discounted at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The amortization of the discount is recognized as part of finance costs.

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(k) Revenue recognition

Revenue represents the fair value of consideration received or receivable from customers for goods and services provided by the Company, net of discounts and sales taxes. The Company reports revenue under four revenue categories being, License, Hardware and other, Professional services, and Maintenance and other recurring revenue.

Typically, the Company's software license agreements are multiple-element arrangements as they may also include maintenance, professional services, and hardware. Multiple-element arrangements are recognized as the revenue for each unit of accounting is earned based on the relative fair value of each unit of accounting as determined by an internal analysis of prices or by using the residual method. A delivered element is considered a separate unit of accounting if it has value to the customer on a standalone basis, and delivery or performance of the undelivered elements is considered probable and substantially under the Company's control. If these criteria are not met, revenue for the arrangement as a whole is accounted for as a single unit of accounting. Where company-specific objective evidence of fair value cannot be determined for undelivered elements, the Company determines fair value of the respective element by estimating its stand-alone selling price, which is also applied for the presentation as part of the revenue categories noted above when certain of those elements are deemed to be a single unit of accounting.

The Company typically sells or licenses software on a perpetual basis, but also licenses software for a specified period. Revenue from short-term time-based licenses, which usually include support services during the license period, is recognized rateably over the license term. Revenue from multi-year time-based licenses that include support services, whether separately priced or not, is recognized rateably over the license term unless a substantive support service renewal rate exists; if this is the case, the amount allocated to the delivered software is recognized as license revenue based on the residual approach once the revenue criteria have been met. In those instances where the customer is required to renew mandatory support and maintenance in order to maintain use of the licensed software over the license term, the Company recognizes the consideration attributable to the license and support for the initial term of the arrangement over the initial term and recognizes revenue for the support renewal fees in subsequent years over the respective renewal periods.

Revenue from the license of software involving significant implementation or customization essential to the functionality of the Company's product, or from the sales of hardware where software is essential to its functionality, is recognized under the percentage-of-completion method of contract accounting based either on the achievement of contractually defined milestones or based on labour hours. Any probable losses are recognized immediately in profit or loss. In certain situations where the outcome of an arrangement cannot be estimated reliably, costs associated with the arrangement are recognized as incurred. In this situation, revenues are recognized only to the extent of the costs incurred that are probable of recovery.

A portion of the Company's sales, categorized as hardware and other revenue, are accounted for as product revenue. Product revenue is recognized when the Company has an executed agreement, the product has been delivered and costs can be measured reliably, the amount of the fee to be paid by the customer is fixed and determinable, and the collection of the related receivable is deemed probable from the outset of the arrangement. If for any of the product or service offerings, the Company determines at the outset of an arrangement that the amount of revenue cannot be measured reliably, and the Company concludes that the inflow of economic benefits associated with the transaction is not probable, then the revenue is deferred until the arrangement fee becomes due and payable by the customer. If, at the outset of an arrangement, the Company determines that collectability is not probable, and the Company concludes that the inflow of economic benefits associated with the transaction is not probable, then revenue recognition is deferred until the earlier of when collectability becomes probable or payment is received. If collectability becomes unlikely before all revenue from an arrangement is recognized, the Company recognizes revenue only to the extent of the fees that are successfully collected unless collectability

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becomes reasonably assured again. If a customer is specifically identified as a collection risk, the Company does not recognize revenue except to the extent of the fees that have already been collected.

Revenue related to the customer reimbursement of travel related expenses incurred during a project implementation is included in the hardware and other revenue category. Revenue is recognized as costs are incurred which is consistent with the period in which the costs are invoiced. Reimbursable travel expenses incurred for which an invoice has not been issued, are recorded as part of work in progress on the statement of financial position.

Maintenance and other recurring revenue primarily consists of fees charged for customer support on software products post-delivery and also includes, to a lesser extent, recurring fees derived from combined software/support contracts, transaction revenues, managed services, and hosted products. The company-specific fair value of maintenance is typically derived from rates charged to renew these services after an initial period. Maintenance revenue remaining to be recognized in profit or loss is recognized as deferred revenue in the statements of financial position when amounts have been billed in advance and the term of the service period has commenced.

Professional Services revenue including implementation, training and customization of software is recognized by the stage of completion of the arrangement determined using the percentage of completion method noted above or as such services are performed as appropriate in the circumstances. The revenue and profit of fixed price contracts is recognized on a percentage of completion basis when the outcome of a contract can be estimated reliably. When the outcome of the contract cannot be estimated reliably, the amount of revenue recognized is limited to the cost incurred in the period. Losses on contracts are recognized as soon as a loss is foreseen by reference to the estimated costs of completion.

Management exercises judgement in determining whether a contract's outcome can be estimated reliably. Management also applies estimates in the calculation of future contract costs and related profitability as it relates to labour hours and other considerations, which are used in determining the value of amounts recoverable on contracts and timing of revenue recognition. Estimates are continually and routinely revised based on changes in the facts relating to each contract. Judgement is also needed in assessing the ability to collect the corresponding receivables.

The timing of revenue recognition often differs from contract payment schedules, resulting in revenue that has been earned but not billed. These amounts are included in work in progress. Amounts billed in accordance with customer contracts, but not yet earned, are recorded and presented as part of deferred revenue.

(I) Finance income and finance costs

Finance income comprises interest income, gains on the disposal of available-for-sale financial assets, and changes in the fair value of financial assets at fair value through profit or loss. Interest income is recognized as it accrues through profit or loss, using the effective interest method.

Finance costs comprise interest expense on borrowings, amortization of the discount on provisions, and impairment losses recognized on financial assets other than trade receivables. Transaction costs attributable to the Company's bank indebtedness are recognized in finance costs using the effective interest method.

(m) Income taxes

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognized in profit or loss except to the extent that it relates to a business combination, or items recognized directly in equity or in other comprehensive income.

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Current tax is the expected taxes payable or receivable on the taxable income or loss for the period, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to taxes payable in respect of previous years.

Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognized for temporary differences relating to investments in subsidiaries to the extent that it is probable that they will not reverse in the foreseeable future. In addition, deferred tax is not recognized for taxable temporary differences arising on the initial recognition of goodwill.

Deferred tax is measured at tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but we intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realized simultaneously.

A deferred tax asset is recognized for unused tax losses, tax credits, difference in tax bases in the purchaser's tax jurisdiction and its cost as reported in the consolidated financial statements as a result of an intra-group transfer of assets and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

(n) Investment tax credits

The Company is entitled to both non-refundable and refundable investment tax credits for qualifying research and development activities. Investment tax credits are accounted for as a reduction of the related expenditure for items of a period expense nature or as a reduction of property and equipment for items of a capital nature when the amount is reliably estimable and the Company has reasonable assurance regarding compliance with the relevant objective conditions and that the credit will be realized.

(o) Segment reporting

An operating segment is a component of the Company that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Company's other components. The operating results of all operating segments are reviewed regularly by the Company's President and Chairman of the Board of Directors to make decisions about resources to be allocated to the segment and assessing their performance.

The Company has six operating segments, referred to as Operating Groups by the Company, being Volaris, Harris, Total Specific Solutions, Jonas, Perseus, and Vela. The operating segments are aggregated by applying the aggregation criteria in IFRS 8, Operating Segments, into two reportable segments Public (Volaris, Harris, TSS Operating Groups) and Private (Jonas, Perseus, Vela Operating Groups). To the extent there have been transfers of business units between our Public and Private segments, we have restated the comparatives for these transfers.

Segment operating results, assets and liabilities include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Unallocated items comprise mainly interest-bearing borrowings and related expenses, and corporate assets and expenses and are included as part of the other segment when reconciling to the Company's consolidated totals.

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Segment capital expenditures are the total costs incurred during the period to acquire segment assets, being property and equipment and intangible assets that are expected to be used for more than one year.

(p) Earnings per share

The Company presents basic and diluted earnings per share data for its ordinary shares, being common shares. Basic earnings per share is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period, adjusted for treasury shares held. Diluted earnings per share is determined by dividing the profit or loss attributable to shareholders of ordinary shares by the weighted average number of shares outstanding, adjusted for the effects of all dilutive potential ordinary shares.

(q) Short-term employee benefits

Short-term employee benefit obligations, including wages, benefits, incentive compensation, and compensated absences are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognized for the amount expected to be paid and settled under the Company's employee incentive compensation plan if the Company has legal or constructive obligation to pay this amount at the time bonuses are paid as a result of past service provided by the employee, and the obligation can be estimated reliably.

(r) Lease payments

Payments made under operating leases are recognized in profit or loss on a straight-line basis over the term of the lease. Lease incentives received are recognized as an integral part of the total lease expense over the term of the lease.

(s) New standards and interpretations adopted

IAS 7 Statement of Cash Flows

The Company implemented the amendments to IAS 7 Statement of Cash Flows, during the year to provide disclosures on changes in liabilities arising from financing activities, including both cash and non-cash flows changes.

(t) New standards and interpretations not yet adopted

IFRS 9 Financial Instruments

IFRS 9 replaces the guidance in IAS 39 Financial Instruments: Recognition and Measurement, on the classification and measurement of financial assets. IFRS 9 eliminates the existing IAS 39 categories of held to maturity, available-for-sale and loans and receivable.

Financial assets will be classified into one of two categories on initial recognition:

- financial assets measured at amortized cost; or
- financial assets measured at fair value.

Gains and losses on remeasurement of financial assets measured at fair value will be recognized in profit or loss, except for an investment in an equity instrument which is not held-for-trading. IFRS 9 provides, on initial recognition,

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an irrevocable election to present all fair value changes from the investment in other comprehensive income (OCI). The election is available on an individual investment-by-investment basis. Amounts presented in OCI will not be reclassified to profit or loss at a later date. IFRS 9 also includes a new general hedge accounting standard which will align hedge accounting more closely with risk management.

The standard has a mandatory effective date for annual periods beginning on or after January 1, 2018 with early adoption permitted. The Company is assessing the impact of this standard on its consolidated financial statements.

IFRS 15 Revenue from Contracts with Customers

On May 28, 2014, the IASB issued IFRS 15 Revenue from Contracts with Customers. The new standard is effective for the Company's fiscal year beginning January 1, 2018.

The standard contains a single five-step model that determines whether, how much and when revenue should be recognized for contracts with customers. New estimates and judgments have been introduced, which may affect the amount and/or timing of revenue recognized. In addition, the standard requires increased quantitative and qualitative disclosures of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers.

IFRS 15 permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application and no restatement of comparative periods (cumulative effect method). The Company expects to utilize the cumulative effect method to adopt the new standard. Furthermore, the Company will be required to disclose the quantitative difference between the reported fiscal 2018 results under IFRS 15 and those that would have been reported under current IFRS.

The Company is continuing to assess the impact of this standard on its consolidated financial statements. The Company has a team focused on the adoption and compliance with IFRS 15. This team is responsible for analyzing existing policies, determining differences between existing policies and IFRS 15, ensuring the Company's data collection is appropriate, quantifying the differences and communicating the upcoming changes with various stakeholders. In addition, this team is assisting with the development of policies and processes that will help to ensure an effective transition and the related impacts are reliably assessed. The Company is currently quantifying the transition impact of its planned policies under IFRS 15.

While the Company continues to assess all potential impacts of the new revenue recognition standard, it currently believes the most significant impacts will relate to the accounting for term based software licenses (including subscription arrangements), those license arrangements where the customer is required to renew support and maintenance in order to maintain ongoing use of the licensed software ("mandatory support and maintenance"), capitalization of direct and incremental contract costs, and expanded disclosure on revenue, performance obligations and contract balances.

Under the Company's current revenue recognition policies, license revenue from term-based licenses is generally deferred and amortized over the period of co-terminus maintenance. Under IFRS 15, the Company has deemed the licenses to be distinct from other performance obligations and expects to recognize the revenue allocated to the license upon contract execution (when the right-to-use the software is granted) and the respective renewal dates. If the cash is collected up-front, we expect to have a reduction to deferred revenue and an increase to revenue as compared to our current policies when the renewal occurs. If cash is collected over the term of the license, we expect to have an increase to our accrued revenue asset and an acceleration of license revenue as compared to our current policies.

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In mandatory support and maintenance arrangements, the Company often receives upfront incremental license fees in the first term that results in a material right discount being offered for renewal periods, for which, under IFRS 15, the incremental license fee received in the first term is allocated (amortized) to the discounted future expected optional customer renewal terms over the estimated life of the software. We expect deferred revenue to increase and revenue to decrease at the outset of these arrangements as compared to our current revenue recognition policies.

Under the Company's current accounting policies, the Company generally expenses incremental commission costs paid to employees to obtain customer contracts. Under IFRS 15, the Company will capitalize and amortize incremental commission costs on a systematic basis, consistent with the pattern of transfer of the good(s) or service(s) to which the commission relates. The Company will allocate the incremental commission costs to the various performance obligations based upon their relative expected margins. For those performance obligations that are expected to be renewed at the end of the initial period (such as post-contract customer support), the Company will consider expected renewals over the life of the intellectual property when determining the expected margins from the arrangement.

IFRS 16 Leases

In January 2016, the IASB issued the final publication of the IFRS 16 Leases standard, which will supersede the current IAS 17, Leases standard. Under IFRS 16, a lease will exist when a customer controls the right to use an identified asset as demonstrated by the customer having exclusive use of the asset for a period of time. IFRS 16 introduces a single accounting model for lessees and all leases will require an asset and liability to be recognized on the statement of financial position at inception. The accounting treatment for lessors will remain largely the same as under IAS 17.

The standard is effective for annual periods beginning on or after January 1, 2019 with early adoption permitted, but only if the entity is also applying IFRS 15. The Company is required to retrospectively apply IFRS 16 to all existing leases as of the date of transition and has the option to either:

- apply IFRS 16 with full retrospective effect; or
- recognize the cumulative effect of initially applying IFRS 16 as an adjustment to opening equity at the date of initial application.

As a practical expedient, an entity is not required to reassess whether a contract is, or contains, a lease at the date of initial application. The Company is assessing the impact of this standard on its consolidated financial statements; however, the Company believes that on adoption of the standard there will be an increase to assets and liabilities, as the Company will be required to record a right-of-use asset and a corresponding lease liability on its Consolidated Statements of Financial Position, as well as a decrease to operating costs, an increase to finance costs (due to accretion of the lease liability) and an increase to depreciation (due to depreciation of the right-of-use asset).

4. Business acquisitions

(a) During the year ended December 31, 2017, the Company completed a number of acquisitions for aggregate cash consideration of \$269,275 plus cash holdbacks of \$53,074 and contingent consideration with an estimated fair value of \$7,406 resulting in total consideration of \$329,755. The contingent consideration is payable on the achievement of certain financial targets in the post-acquisition periods. The obligation for contingent consideration for acquisitions during the year ended December 31, 2017 has been recorded at its estimated fair value at the various acquisition dates. The estimated fair value of the applicable contingent consideration is calculated using the weighted probability of the expected contingent consideration to be paid and inclusion of a discount rate as appropriate. For these arrangements, which include both maximum, or capped, and unlimited contingent

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consideration amounts, the estimated increase to the initial consideration is not expected to exceed a maximum of \$39,319. Aggregate contingent consideration of \$24,734 (December 31, 2016 - \$15,538) has been reported in the consolidated statement of financial position at its estimated fair value relating to applicable acquisitions completed in the current and prior periods. Changes made to the estimated fair value of contingent consideration are included in other, net in the consolidated statements of income. An expense of \$5,989 has been recorded for the year ended December 31, 2017, as a result of such changes (an expense of \$20 for the year-ended December 31, 2016).

There were no acquisitions during the period that were deemed to be individually significant. 69% of the total businesses acquired during the year were acquisitions of shares and the remainder was asset acquisitions. The cash holdbacks are generally payable over a two-year period and are adjusted, as necessary, for such items as working capital or net tangible asset assessments, as defined in the agreements, and claims under the respective representations and warranties of the purchase and sale agreements.

The acquisitions during the year ended December 31, 2017 include software companies catering to the following markets; communications, local government, schools administration, electric utilities, design and welding, public safety, manufacturing plant performance, marine asset management, fitness, agriculture equipment dealers, automotive, retail management and distribution, school and special library information systems, transit, asset management, food services, oil and gas, insurance, publishing, lease management, accountancy, tour operators, catering, collections management, association management, higher education, real estate brokers and agents, fashion retail, hospitality and healthcare, all of which are software businesses similar to existing businesses operated by the Company. The acquisitions have been accounted for using the acquisition method with the results of operations included in these consolidated financial statements from the date of each acquisition.

The goodwill recognized in connection with these acquisitions is primarily attributable to the application of Constellation's best practices to improve the operations of the companies acquired, synergies with existing businesses of Constellation, and other intangibles that do not qualify for separate recognition including assembled workforce. Goodwill in the amount of \$5,523 is expected to be deductible for income tax purposes.

A bargain purchase gain totalling \$9,918 arose on certain acquisitions because the fair value of the separately identifiable assets and liabilities exceeded the total consideration paid, principally due to the acquisition of certain assets that will benefit the Company that had limited value to the seller. The bargain purchase gain has been recorded in profit or loss in the consolidated statements of income.

The gross contractual amounts of acquired receivables was \$44,848; however, the Company has recorded an allowance of \$1,731 as part of the acquisition accounting to reflect contractual cash flows that are not expected to be collected.

Due to the complexity and timing of certain acquisitions made, the Company is in the process of determining and finalizing the estimated fair value of the net assets acquired as part of the acquisitions closed during 2017. The amounts determined on a provisional basis generally relate to net asset assessments and measurement of the assumed liabilities, including acquired contract liabilities. The cash consideration associated with these provisional estimates totals \$269,275.

The aggregate impact of acquisition accounting applied in connection with business acquisitions in the year ended December 31, 2017 is as follows:

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

	Pu	ıblic Sector	Private Secto	r	Consolidated	
Assets acquired:						
Cash	\$	25,917	\$ 18,21	1 \$	44,128	
Accounts receivable		30,063	13,05	4	43,117	
Other current assets		24,700	4,90	3	29,603	
Property and equipment		6,362	1,21	4	7,576	
Other non-current assets		2,125	-		2,125	
Deferred income taxes		9,553	2,65	5	12,208	
Technology assets		147,844	77,54	8	225,392	
Customer assets		66,534	44,65	7	111,191	
		313,098	162,24	2	475,340	
Liabilities assumed:						
Current liabilities		20,583	13,31	9	33,902	
Deferred revenue		44,787	22,72	1	67,508	
Deferred income taxes		21,265	18,69	5	39,960	
Other non-current liabilities		8,992	2,16	5	11,157	
		95,627	56,90	0	152,527	
Goodwill		7,302	9,55	8	16,860	
Bargain purchase gain		(9,918)	-		(9,918)	
Total consideration	\$	214,855	\$ 114,900) \$	329,755	

(b) The 2017 business acquisitions did not have a material impact to either the consolidated revenue or the consolidated net income for the year ended December 31, 2017. The materiality threshold is reviewed on an annual basis taking into account the quantitative (contribution to revenue and net income) and qualitative (size and comparability with other Constellation businesses) factors of current period acquisitions on both an individual and aggregate basis.

5. Equity securities available-for-sale

During 2016, the Company made investments in two public companies listed in the U.S. and Canada, both of which develop and sell software solutions. These investments have been designated as available-for-sale. The unrealized gains/losses related to the available-for-sale equity securities have been recorded in Accumulated other comprehensive income (loss). In 2016, the Company fully disposed of one of these investments and in the year ended December 31, 2017, the Company fully disposed of its remaining investment. The realized gain or loss upon disposition was recorded in Finance and other expense (income) in the Consolidated Statement of Income. Note 18 of the consolidated financial statements outlines the gains and losses on the equity securities available-for-sale in each of the applicable periods.

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

	December 31, 2017				December 31, 2016			
	Cost		Fair Value	Cost Fair		Fair Value		
Common shares	\$ -	\$	-	\$	4,419	\$	4,236	

6. Inventories

	De	ecember 31, 2017	December 31 2016		
Raw materials Work in progress	\$	1,067	\$	11,529 767	
Finished goods		8,684		7,371	
Total	\$	23,196	\$	19,667	

No inventories were carried at fair value less cost to sell, and the carrying amount of inventories subject to retention of title clauses was \$nil as at December 31, 2017 and 2016.

Raw materials (which consists primarily of hardware components) and changes in finished goods and work in progress recognized as hardware expenses in the consolidated statements of income amounted to \$81,086 (2016: \$74,431). The write-downs of inventories to net realizable value amounted to \$2,968 (2016: \$1,722). The reversals of write-downs amounted to \$2,238 (2016: \$581). Write-downs and reversals of write-downs are based on the Company's projected sales. The write-downs and reversals are included in hardware expenses.

7. Other assets and liabilities

(a) Other assets

	December 31, 2017	December 31, 2016
Prepaid and other current assets	\$ 56,520	\$ 46,931
Other assets (ii)	-	18,779
Investment tax credits recoverable	19,095	21,140
Sales tax receivable	15,696	3,971
Other receivables	8,787	5,360
Total other current assets	\$ 100,098	\$ 96,181
Investment tax credits recoverable	\$ 10,646	\$ 10,670
Non-current trade and other receivables and other assets	8,896	7,842
Equity accounted investees (i)	2,259	1,270
Total other non-current assets	\$ 21,801	\$ 19,782

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

(i) Equity accounted investees

- (i) The Company's share of net income (loss) in its investments currently being accounted for as equity investees for the year ended December 31, 2017 was \$369 (December 31, 2016 \$5,317).
- (ii) As at December 31, 2016, one of our investments (which was historically classified as a non-current asset and accounted for as an equity investee) was classified as an other current asset. During the year ended December 31, 2017, this balance was collected. The cash proceeds of \$18,779 have been reflected as an investing activity in the consolidated statement of cash flows

(b) Other liabilities

	Decer	December 31, 2017		cember 31, 2016
Contingent consideration	\$	12,406	\$	8,793
Acquired contract liabilities		1,580		9,056
Other non-current liabilities		19,535		18,791
Total other non-current liabilities	\$	33,521	\$	36,640

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

8. Property and equipment

	Computer hardware			Computer software	Furniture and equipment	Leasehold provements	Building		Total	
Cost										
Balance at January 1, 2016	\$	46,190	\$	22,450	\$ 25,424	\$ 15,211	\$	3,118 \$	112,393	
Additions		7,763		2,723	4,774	3,836		2	19,09	
Acquisitions through business combinations		5,142		141	2,109	954		933	9,279	
Disposals / retirements		(10,378)		(2,679)	(5,120)	(2,550)		(3)	(20,730	
Effect of movements in foreign exchange and other		(1,586)		(691)	(1,226)	(365)		(210)	(4,078	
Balance at December 31, 2016	\$	47,131	\$	21,944	\$ 25,961	\$ 17,086	\$	3,840 \$	115,962	
Balance at January 1, 2017	\$	47,131	\$	21,944	\$ 25,961	\$ 17,086	\$	3,840 \$	115,962	
Additions		10,665		2,547	3,439	3,060		-	19,71	
Acquisitions through business combinations		2,549		634	3,016	1,195		4	7,398	
Disposals / retirements		(16,265)		(3,510)	(4,701)	(1,458)		54	(25,880	
Effect of movements in foreign exchange and other		5,801		2,384	1,697	1,127		531	11,540	
Balance at December 31, 2017	\$	49,881	\$	23,999	\$ 29,412	\$ 21,010	\$	4,429 \$	128,73	
Depreciation and impairment losses										
Balance at January 1, 2016	\$	30,331	\$	18,223	\$ 13,978	\$ 7,504	\$	285 \$	70,32	
Depreciation charge for the year		11,134		3,106	4,399	3,602		135	22,370	
Disposals / retirements		(10,120)		(2,527)	(4,915)	(2,397)		-	(19,959	
Effect of movements in foreign exchange and other		(1,439)		(615)	(839)	(255)		(23)	(3,17	
Balance at December 31, 2016	\$	29,906	\$	18,187	\$ 12,623	\$ 8,454	\$	397 \$	69,56	
Balance at January 1, 2017	\$	29,906	\$	18,187	\$ 12,623	\$ 8,454	\$	397 \$	69,56	
Depreciation charge for the year		11,744		2,814	5,058	2,832		128	22,570	
Disposals / retirements		(16,471)		(3,521)	(4,223)	(1,426)		-	(25,64	
Effect of movements in foreign exchange and other		4,322		2,138	1,162	720		70	8,412	
Balance at December 31, 2017	\$	29,501	\$	19,618	\$ 14,620	\$ 10,580	\$	595 \$	74,91	
Carrying amounts:										
At January 1, 2016	\$	15,859	\$	4,227	\$ 11,446	\$ 7,707	\$	2,833 \$	42,072	
At December 31, 2016	\$	17,225	\$	3,757	\$ 13,338	\$ 8,632	\$	3,443 \$	46,39	
At January 1, 2017	\$	17,225	\$	3,757	\$ 13,338	\$ 8,632	\$	3,443 \$	46,39:	
At December 31, 2017	\$	20,380		4,381	\$ 14,792	\$ 10,430	\$	3,834 \$,	

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

9. Intangible assets and goodwill

		Technology Assets		Customer Assets		Backlog		Non-compete agreements		Trademarks		Goodwill		Total
Cost														
Balance at January 1, 2016	\$	1,029,661	\$	525,846	\$	16,227	\$	2,552	\$	6,872	\$	216,263	\$	1,797,421
Acquisitions through business combinations		171,421		73,879		-		-		-		16,776		262,076
Effect of movements in foreign exchange		(24,235)		(15,669)		(46)		14		(205)		(6,537)		(46,678
Balance at December 31, 2016	\$	1,176,847	\$	584,056	\$	16,181	\$	2,566	\$	6,667	\$	226,502	\$	2,012,819
Balance at January 1, 2017	\$	1,176,847	\$	584,056	\$	16,181	\$	2,566	\$	6,667	\$	226,502	\$	2,012,819
Acquisitions through business combinations		226,559		111,289		-		-		-		8,010		345,858
Effect of movements in foreign exchange		46,619		36,060		101		33		923		24,694		108,430
Balance at December 31, 2017	\$	1,450,025	\$	731,405	\$	16,282	\$	2,599	\$	7,590	\$	259,206	\$	2,467,107
Accumulated amortization and impairment losses	\$	619,984	¢	205,798	¢	16,212	¢	2,552	¢	766	¢		¢	845,312
Balance at January 1, 2016	2	· · · · · ·	2	· · · · · ·	\$	16,212	\$	2,552	\$		3	-	\$,
Amortization for the year		138,907		51,319		- (21)		-		348		-		190,574
Effect of movements in foreign exchange	¢.	(12,031)	¢.	(4,684)	¢	(31)	¢.	2.566	¢	(78)	¢	-	¢	(16,810
Balance at December 31, 2016	\$	746,860	Þ	252,433	Э	16,181	Þ	2,566	3	1,036	Þ	-	2	1,019,076
Balance at January 1, 2017	\$	746,860	\$	252,433	\$	16,181	\$	2,566	\$	1,036	\$	-	\$	1,019,076
Amortization for the period		171,994		57,984		-		-		516		-		230,494
Effect of movements in foreign exchange		26,470		9,600		101		33				-		36,204
Balance at December 31, 2017	\$	945,324	\$	320,017	\$	16,282	\$	2,599	\$	1,552	\$	-	\$	1,285,774
Carrying amounts														
At January 1, 2016	\$	409,677	\$	320,048	\$	15	\$	-	\$	6,106	\$	216,263	\$	952,109
At December 31, 2016	\$	429,987	\$	331,623	\$	-	\$	-	\$	5,631	\$	226,502	\$	993,743
At January 1, 2017	\$	429,987	\$	331,623	\$	-	\$	-	\$	5,631	\$	226,502	\$	993,743
At December 31, 2017	\$	504,701	\$	411,388	\$		\$	_	\$	6,038	\$	259,206	\$	1,181,333

Impairment testing for cash-generating units containing goodwill

The annual impairment test of goodwill was performed as of December 31, 2017 and 2016 and did not result in any impairment loss. For the purpose of impairment testing, goodwill is allocated to the Company's business units included in each operating segment, which represent the lowest level within the Company at which goodwill is monitored for internal management purposes. There was no goodwill reallocated to the Company's business units that was deemed to be significant in comparison to the carrying amount of goodwill as at December 31, 2017.

The Company has three CGUs whereby the total goodwill allocated is significant in comparison to the Company's total carrying amount of goodwill. The total goodwill allocated to each of these CGUs as at December 31, 2017 is \$26,101, \$27,071 and \$26,881. In determining the recoverable amount, the Company applied an estimated market valuation multiple to the business unit's most recent annual recurring revenues, which are derived from combined

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

software/support contracts, transaction revenues, and hosted products. Valuation multiples, which are Level 3 inputs, applied by management for this purpose reflect current market conditions specific to the business unit and are assessed for reasonability by comparison to the Company's current and past acquisition experience involving ranges of revenue-based multiples required to acquire representative software companies.

10. CSI Facility, New CNH Facility and CNH Facility

On October 27, 2017, Constellation completed an amendment and restatement of its revolving credit facility agreement (the "CSI Facility"), with a syndicate of Canadian chartered banks and U.S. banks in the amount of \$460,000, extending its maturity date to October 27, 2022. The CSI Facility bears a variable interest rate with no fixed repayments required over the term to maturity. Interest rates are calculated at standard U.S. and Canadian reference rates plus interest rate spreads based on a leverage table. The CSI Facility is currently collateralized by the majority of the Company's assets including the assets of certain material subsidiaries. The CSI Facility contains standard events of default which if not remedied within a cure period would trigger the repayment of any outstanding balance. As at December 31, 2017, \$nil (December 31, 2016 – \$nil) had been drawn from this credit facility, and letters of credit totaling \$17,092 (December 31, 2016 - \$15,377) were issued, which limits the borrowing capacity on a dollar-for-dollar basis. Transaction costs associated with the CSI Facility in the amount of \$1,721 have been capitalized and included in other non-current assets in the consolidated statement of financial position and are being amortized through profit or loss using the effective interest rate method. Amortized costs recognized in the year ended December 31, 2017 relating to this line-of-credit amounted to \$267 (December 31, 2016 - \$225). As at December 31, 2017 the carrying amount of such costs is \$1,229 (December 31 2016 - \$987).

On June 24, 2014 Constellation Software Netherlands Holding Cooperatief U.A. ("CNH"), a subsidiary of Constellation and the indirect owner of 100% of TSS, entered into a €150,000 term and €10,000 multicurrency revolving credit facility (the "CNH Facility") with a number of European and North American financial institutions. The CNH Facility bears interest at a rate calculated at EURIBOR plus interest rate spreads based on a leverage table. The CNH Facility is collateralized by substantially all of the assets owned by CNH and its subsidiaries which includes substantially all of the assets of TSS and its subsidiaries. The CNH Facility contains standard events of default which if not remedied within a cure period would trigger the repayment of any outstanding balance. On July 14, 2017 (in conjunction with the issuance of the New CNH Facility as defined below), the principal outstanding on the term loan of €116,500 was repaid in full and the CNH Facility was extinguished. Unamortized transaction costs of \$3,341 associated with the CNH Facility have been included in profit or loss.

On July 14, 2017, CNH entered into a new credit facility (the "New CNH Facility") with a number of European financial institutions. Under this credit facility, CNH will be able to borrow up to €300,000 under a multicurrency revolving loan facility and up to €50,000 under an additional uncommitted term loan facility. The New CNH Facility has an initial term of five years with an extension option for two additional one year periods. The New CNH Facility bears interest at a rate calculated at EURIBOR plus interest rate spreads based on a leverage table. The New CNH Facility is collateralized by substantially all of the assets owned by CNH and its subsidiaries which includes substantially all of the assets of TSS and its subsidiaries. The New CNH Facility contains standard events of default which if not remedied within a cure period would trigger the repayment of any outstanding balance. As at December 31, 2017, €82,000 (\$98,227) had been drawn from this credit facility. Transaction costs associated with the New CNH Facility have been included as part of the carrying amount of the liability and are being amortized through profit or loss using the effective interest rate method. Amortized costs recognized in the year ended December 31, 2017 relating to this facility amounted to \$214. As at December 31, 2017, the carrying amount of such costs relating to this facility totaling approximately €1,529 (\$1,829) has been classified as part of the New CNH Facility in the consolidated statement of financial position.

The New CNH Facility and CSI Facility are independent of each other. The New CNH Facility is not guaranteed by Constellation or its subsidiaries nor is Constellation or its subsidiaries subject to the terms of the New CNH Facility other than, in each case, CNH and its subsidiaries. Similarly, CNH and its subsidiaries did not guarantee

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

Constellation's other credit facilities and are not subject to the provisions thereof. Constellation's credit facilities impose limitations on the aggregate amount of investment that Constellation may make in CNH and its subsidiaries and the financial results of CNH and its subsidiaries are not included for the purposes of determining compliance by Constellation with the financial covenants in Constellation's other credit facilities. The New CNH Facility imposes limitations on the amount of distributions that CNH and its subsidiaries may make to Constellation.

11. Debentures

On October 1, 2014 and November 19, 2014, the Company issued debentures with a total principal value of C\$96,038 for total proceeds of C\$91,236. On September 30, 2015, the Company issued another tranche of debentures (collectively with the 2014 issuances called the "Debentures") with a total principal value of C\$186,249 for total proceeds of C\$214,186.

The Debentures have a maturity date of March 31, 2040 (the "Maturity Date"). From and including the date of issue to but excluding March 31, 2015, the Debentures bore interest at a rate of 7.4% per annum, paid quarterly in arrears. The rate from March 31, 2015 to March 30, 2016 was 8.5% per annum. The rate from March 31, 2016 to March 30, 2017 was 7.6%. The rate from and including March 31, 2017 to but excluding March 31, 2018 is 7.9%. The rate from and including March 31, 2018 to but excluding March 31, 2019 is 8.1%. From and including March 31, 2019 to but excluding the Maturity Date, the interest rate applicable to the Debentures will be reset on an annual basis on March 31 of each year, at a rate equal to the annual average percentage change in the All-items Consumer Price Index during the 12 month period ending on December 31 in the prior year (which amount may be positive or negative) plus 6.5%. Notwithstanding the foregoing, the interest rate applicable to the debentures will not be less than 0%. The Company may, subject to certain approvals, elect the Payment in Kind election ("PIK Election"), in lieu of paying interest in cash, to satisfy all or any portion of its interest obligation payable on an interest payment date by issuing to each Debenture holder PIK Debentures equal to the amount of the interest obligation to be satisfied. The PIK Debentures will have the same terms and conditions as the Debentures and will form part of the principal amount of the Debentures. If, on any interest payment date, the Company fails to pay the amount of interest owing on the Debentures in full in cash, the Company will not (A) declare or pay dividends of any kind on the Common Shares, nor (B) participate in any share buyback or redemption involving the Common Shares, until the date on which the Company pays such interest (or the unpaid portion thereof) in cash to holders of the Debentures; however, where the Company has issued PIK Debentures in respect of all or a portion of the amount of interest owing on the Debentures on an interest payment date, the Company may resume declaring or paying dividends of any kind on the Common Shares and participating in any share buyback or redemption involving the Common Shares beginning on the next earlier of (i) the interest payment date of which the Company pays the amount of interest owing on the Debentures in full in cash and (ii) the date on which the Company repays all amounts owing under the PIK Debenture. All payments in respect of the Debentures will be subordinated in right of payment to the prior payment in full of all senior indebtedness of the Company.

The Debentures will be redeemable in certain circumstances at the option of the Company or the holder. During the period beginning on March 16 and ending on March 31 of each year, the Company will have the right, at its option, to give notice to holders of Debentures of its intention to redeem the Debentures, in whole or in part, on March 31 in the year that is five years following the year in which notice is given, at a price equal to the principal amount thereof plus accrued and unpaid interest up to but excluding the date fixed for redemption. During the period beginning on March 1 and ending on March 15 of each year, holders of Debentures will also have the right, at their option, to give notice to the Company of their intention to require the Company to repurchase (or to "put") the Debentures, in whole or in part, on March 31 in the year that is five years following the year in which notice is given, at a price equal to the principal amount thereof plus accrued and unpaid interest up to but excluding the date fixed for repurchase.

During the years ended December 31, 2017 and December 31, 2016, no notices for redemption of the Debentures were received or given by the Company.

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

12. TSS Membership Liability

On December 23, 2014, in accordance with the terms of the purchase and sale agreement for the TSS acquisition, and on the basis of the term sheets attached thereto, Constellation and the sellers of TSS along with members of TSS' executive management team (collectively, the "minority owners") entered into a Members Agreement pursuant to which the minority owners acquired 33.29% of the voting interests in CNH. Total proceeds from this transaction was €39,375 (\$48,503).

Commencing any time after December 31, 2014, each of the minority owners may exercise a put option to sell all or a portion of their interests in CNH back to Constellation for an amount calculated in accordance with a valuation methodology described within the Members Agreement. Accordingly, the Company classified the proceeds from the Members Agreement as a liability. The main valuation driver in such calculation is the maintenance and other recurring revenue of CNH. Upon the exercise of a put option, Constellation would be obligated to redeem up to 33.33% of the minority owners' interests put, no later than 30 business days from the date notice is received, and up to 33.33% on each of the first and second anniversary of the date the first redemption payment is made. In determining the valuation of the liability at each reporting period, the Company assumes the minority owners exercised their put option on the last day of the current reporting period, and redeemed 33.33% of their interests on exercise (which is classified as a current liability), and will redeem 33.33% on each of the first and second anniversary dates. Maintenance and recurring revenue of CNH for the trailing twelve months determined at the end of the current reporting period was used as the basis for valuing the interests at each redemption date. Any increase or decrease in the value of the membership liability is recorded as an expense or income in the consolidated statements of income for the period.

The seller of TSS also has an option available to it to sell approximately 68% of its interests in CNH, for an amount calculated in accordance with a valuation methodology described within the Members Agreement, in the event that Robin Van Poelje, TSS' CEO, is no longer employed by TSS. The remaining interest of approximately 32% can be sold via the put option described above.

In the event of a change of control in Constellation, the minority owners would have the option to sell 100% of their interests in CNH for an amount calculated in accordance with a valuation methodology described within the Members Agreement. Constellation would be obligated to remit payment in respect thereof no later than 30 business days from the date notice is given.

Commencing at any time after December 31, 2023, Constellation may exercise a call option to purchase all of the minority owners' interests in CNH, for an amount calculated in accordance with a valuation methodology described within the Members Agreement. Upon exercise of the call option, the full purchase price will be paid within 30 business days of the notice date, following which the minority owners' membership in CNH will be terminated.

If any of TSS' executive management team that participate in the Members Agreement are terminated for urgent cause as defined in Section 7:678 of the Dutch Civil Code, Constellation shall have the right to purchase all of the interests beneficially owned by the terminated executive for an amount calculated in accordance with a valuation methodology described with the Members Agreement. The full purchase price will be paid within 30 business days from the date notice is given, following which the terminated executive's membership in CNH will be terminated. An option does exist for the terminated executive to elect to be paid in annual installments of 33.33% of his interests in CNH over a 3-year period. The valuation of the interests being purchased will be calculated at each reporting period. During the years ended December 31, 2017 and December 31, 2016, no options were exercised.

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

13. Provisions

At January 1, 2017	\$ 9,034
Reversal	(698)
Provisions recorded during the period	11,820
Provisions used during the period	(9,084)
Effect of movements in foreign exchange and other	384
At December 31, 2017	\$ 11,456
Provisions classified as current liabilities	10,377
Provisions classified as other non-current liabilities	1,079

The provisions balance is comprised of various individual provisions for severance costs and other estimated liabilities of the Company of uncertain timing or amount.

14. Income taxes

(a) Tax recognized in profit or loss

	2017	2016
Tax recognized in profit or loss		
Current tax expense (recovery)		
Current year	\$ 108,789	\$ 89,573
Adjustment for prior years	(2,313)	(4,630)
	106,476	84,943
Deferred tax expense (recovery)		
Origination and reversal of temporary differences	(11,613)	(6,939)
Effect of change in future tax rates	7,417	60
Change in recognized temporary differences and unrecognized tax losses	(1,032)	1,574
Recognition of previously unrecognized losses	(2,334)	(23)
	(7,562)	(5,328)
Total tax expense (recovery)	98,914	79,615

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

(b) Reconciliation of effective tax rate

	2017	2016
Net income for the year	\$ 221,968	\$206,784
Total tax expense	98,914	79,615
Net income before tax	320,882	286,399
Income tax expense using the Company's statutory tax rate of 26.5% (2016 - 26.5%)	85,034	75,895
Impact on taxes from:		
Foreign tax rate differential	9,912	5,334
Other, including non deductible expenses and non taxable income	2,230	1,405
Change in recognized temporary differences and unrecognized tax losses	(1,032)	1,574
Effect of change in future tax rates	7,417	60
Recognition of prior year tax losses	(2,334)	(23)
Under (over) provisions in prior years	(2,313)	(4,630)
	98,914	79,615

Constellation is subject to tax audits in the countries in which the Company does business globally. These tax audits could result in additional tax expense in future periods relating to historical filings. Reviews by tax authorities generally focus on, but are not limited to, the validity of the Company's inter-company transactions, including financing and transfer pricing policies which generally involve subjective areas of taxation and a significant degree of judgment. If any of these tax authorities are successful with their challenges, the Company's income tax expense may be adversely affected and Constellation could also be subject to interest and penalty charges.

15. Deferred tax assets and liabilities

(a) Unrecognized deferred tax liabilities

The aggregate amount of temporary differences associated with investments in subsidiaries for which we have not recognized deferred tax liabilities is \$642,821 (2016: \$627,262) as the Company ultimately controls whether the liability will be incurred and it is satisfied that it will not be incurred in the foreseeable future. The temporary differences relate to undistributed earnings of that Company's subsidiaries. Dividends declared would be subject to withholding tax in the range of 0-15% depending on the jurisdiction of the subsidiary.

(b) Unrecognized deferred tax assets

	2017	2016	
Deductible temporary differences, including capital losses	\$ 30,181	\$ 28,750	
Non capital tax losses	\$ 104,657	\$ 74,583	

Non-capital tax losses of \$56,270 expire between 2018 and 2037 and \$48,387 can be carried forward indefinitely. Included in the non-capital tax losses expiring between 2018 and 2037 is \$27,900 of losses that are not expected to be used to offset future taxable profit as a result of legislative restrictions in the jurisdiction where those losses exist. The deductible temporary differences and capital losses do not expire under current tax legislation. Deferred tax assets have not been recognized in respect of those items because it is not probable that future taxable profit will be available in those jurisdictions against which the Company can utilize these benefits.

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

(c) Recognized deferred tax assets and liabilities

	As	sets	Liabiliti	es	Ne	et
	2017	2016	2017	2016	2017	2016
Property, plant and equipment	3,145	2,831	(1,141)	(1,632)	2,004	1,199
Intangible assets	80,933	117,317	(216,733)	(222,714)	(135,800)	(105,397)
Reserves	10,796	16,188	(853)	(122)	9,943	16,066
Non capital loss carryforwards	16,881	6,398	-	-	16,881	6,398
SR&ED expenditure pool	329	755	(324)	(84)	5	671
Deferred revenue	8,067	12,924	(1,135)	(950)	6,932	11,974
Foreign and other tax credits	8	238	(3,704)	(3,168)	(3,696)	(2,930)
Other, including capital losses, withholding tax and foreign exchange	1,963	5,374	(8,831)	(13,077)	(6,868)	(7,703)
Tax assets (liabilities)	122,122	162,025	(232,721)	(241,747)	(110,599)	(79,722)
Reclassification	(83,760)	(112,162)	83,760	112,162		
Net tax assets (liabilities)	38,362	49,863	(148,961)	(129,585)	(110,599)	(79,722)

This reclassification relates to the offsetting of deferred tax assets and deferred tax liabilities to the extent that they relate to the same taxing authorities and there is a legally enforceable right to do so.

(d) Movement in deferred tax balances during the year

	Balance January 1, 2017	Recognized in profit or loss	Recognized in other comprehensive income	Acquired in business combinations	Other	Balance December 31, 2017
Property, plant and equipment	1,199	896	_	(91)	_	2,004
Intangible assets	(105,397)	3,970	-	(34,373)	-	(135,800)
Reserves	16,066	(6,394)	-	271	-	9,943
Non-capital loss carryforwards	6,398	5,925	-	4,558	-	16,881
SR&ED expenditure pool	671	(666)	-	-	-	5
Deferred revenue	11,974	(6,544)	-	1,502	-	6,932
Tax credits	(2,930)	(757)	-	(9)	-	(3,696)
Other, including capital losses, withholding tax and foreign exchange	(7,703)	11,132	(152)	389	(10,534)	(6,868)
	(79,722)	7,562	(152)	(27,752)	(10,534)	(110,599)

	Balance January 1, 2016	Recognized in profit or loss	Recognized in other comprehensive income	Acquired in business combinations	Other	Balance December 31, 2016
Property, plant and equipment	1,078	146	_	(25)	_	1,199
Intangible assets	(70,639)	8,418	-	(43,176)	-	(105,397)
Reserves	16,715	(945)	-	296	-	16,066
Non-capital loss carryforwards	7,471	(7,473)	-	6,400	-	6,398
SR&ED expenditure pool	1,094	(423)	-	-	-	671
Deferred revenue	3,787	7,697	-	490	-	11,974
Tax credits	(3,140)	210	-	-	-	(2,930)
Other, including capital losses, withholding tax and foreign exchange	(9,511)	(2,302)	(143)	(105)	4,358	(7,703)
	(53,145)	5,328	(143)	(36,120)	4,358	(79,722)

The United States Tax Cuts and Jobs Act ("U.S. Tax Reform") was enacted on December 22, 2017 and became effective January 1, 2018. Although the legislative changes contained in the U.S. Tax Reform are extensive and the interpretation of several aspects of such U.S. Tax Reform is still unclear, the Company recorded an income tax

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

expense for all significant known and determinable impacts during the fourth quarter of 2017. In connection with the reduction in U.S. federal corporate tax rates from 35% to 21%, the Company recorded an increase to its deferred income tax expense of \$7,423 to re-value its recognized net deferred tax assets. The Company believes that all significant one-time impacts resulting from the U.S. Tax Reform have been recorded in the fourth quarter of 2017. The Company will continue to assess the impacts, if any, throughout 2018 as they become known due to changes in its interpretations and assumptions, as well as additional regulatory guidance that may be issued.

16. Capital and other components of equity

Capital Stock

At December 31, 2017 and December 31, 2016, the authorized share capital of Constellation consisted of an unlimited number of voting common shares and a limited number of non-voting preferred shares (there are no preferred shares outstanding).

	Common Shares				
	Number	Amoun			
December 31, 2017	21,191,530	\$	99,283		
December 31, 2016	21,191,530	\$	99,283		

Accumulated other comprehensive income (loss)

Accumulated other comprehensive income (loss) is comprised of the following separate components of equity:

Cumulative translation account

The cumulative translation account comprises all foreign currency differences arising from the translation of the financial statements of foreign operations, as well as foreign exchange gains and losses arising from monetary items that form part of the net investment in the foreign operation.

Amounts related to derivatives designated as hedges

The portion of the gain or loss on derivatives designated as hedges that are determined to be an effective hedge are recognized directly in other comprehensive income, and the ineffective portion in the statement of income. The gains or losses deferred in other comprehensive income in this way are subsequently recognized in the statement of income in the same period in which the hedged underlying transaction or firm commitment is recognized in the statement of income.

Amounts related to available-for-sale financial assets

Available-for-sale differences comprise the cumulative net change in the fair value of available-for-sale financial assets until the investments are sold/derecognized or impaired.

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

Dividends

During the year ended December 31, 2017, the Board of Directors approved and the Company declared dividends of \$4.00 per common share. The dividend declared in the quarter ended December 31, 2017 representing \$21,192 was paid and settled on January 4, 2018. The dividend declared in the quarter ended September 30, 2017 representing \$21,192 was paid and settled on October 4, 2017. The dividend declared in the quarter ended June 30, 2017 representing \$21,192 was paid and settled on July 6, 2017. The dividend declared in the quarter ended March 31, 2017 representing \$21,192 was paid and settled on April 5, 2017.

A dividend of \$1.00 per share representing \$21,192 was accrued as at December 31, 2016 and subsequently paid and settled on January 5, 2017.

17. Revenue

The Company sub-classifies revenue within the following components: license revenue, professional services revenue, hardware and other revenue, and maintenance and other recurring revenue. Software license revenue is comprised of license fees charged for the use of software products licensed under multiple-year or perpetual arrangements in which the fair value of maintenance and/or professional service fees are determinable. Professional service revenue consists of fees charged for implementation services, custom programming, product training and consulting. Hardware and other revenue includes the resale of third party hardware as part of customized solutions, as well as sales of hardware assembled internally and the reimbursement of travel costs. Maintenance and other recurring revenue primarily consists of fees charged for customer support on software products post-delivery and also includes recurring fees derived from combined software/support contracts, transaction revenues, managed services, and hosted products.

Revenues from the application of contract accounting are typically allocated to license revenue, professional service revenue and hardware and other revenue based on their relative fair values when the amount recognized in the period is determined using the percentage of completion method under contract accounting. During the year ended December 31, 2017 \$343,832 (December 31, 2016 - \$315,143) of contract revenue was recognized.

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

18. Finance and other income and finance costs

	Year ended December 31,		nber 31,
	2017		2016
Losses (gains) on sale of available-for-sale financial			
assets transferred from other comprehensive income	\$ 1,540	\$	(5,204)
Interest income on cash	(4,077)		(824)
Finance and other income	(639)		(4,806)
Finance and other income	\$ (3,176)	\$	(10,834)
Interest expense on bank indebtedness and debentures	\$ 22,530	\$	22,861
Amortization of debt related transaction costs	4,244		1,089
Amortization of debenture discount (premium) and associated rights offering, net	(4,137)		(4,059)
Other finance costs	2,151		1,682
Finance costs	\$ 24,788	\$	21,573

Included in finance and other income in 2016 is a \$4,210 adjustment which was made during 2016 relating to the acquired net tangible assets of an acquisition which closed in March 2015.

The Company had entered into a three year floating-to-fixed interest rate swap to manage its cash-flow interest rate risk associated with the CNH Facility. The Company applied hedge accounting and determined that this is an effective hedge. Payments under the interest rate swap were made quarterly. The interest rate swap contract matured in the year ended December 31, 2017 and as a result, the fair value at December 31, 2017 was \$nil (December 31, 2016 - \$503). The notional principal amount of the outstanding floating to fixed interest rate swap contract at December 31, 2016 was €120,000.

19. Earnings per share

Basic and diluted earnings per share

	Year ended December 31,			
	2017		2016	
Numerator:				
Net income	\$ 221,968	\$	206,784	
Denominator:				
Basic and diluted shares outstanding	21,192		21,192	
Earnings per share				
Basic and diluted	\$ 10.47	\$	9.76	

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

20. Capital risk management

The Company's objectives in managing capital are to ensure sufficient liquidity to pursue its strategy of organic growth combined with strategic acquisitions and to provide returns to its shareholders. The Company manages its capital with the objective of ensuring that there are adequate capital resources while maximizing the return to shareholders through the optimization of the debt and equity balance. The capital structure of the Company consists of cash, CSI facility, New CNH facility, Debentures, TSS membership liability and components of shareholders' equity including retained earnings and capital stock.

The Company is subject to certain covenants on its CSI facility. The covenants include a leverage ratio and an interest coverage ratio. The New CNH facility is also subject to certain covenants. The covenants include a leverage ratio and an interest coverage ratio. The Company monitors the ratios on a quarterly basis. As at December 31, 2017, the Company is in compliance with its debt covenants. Other than the covenants required for the CSI facility and the New CNH facility, the Company is not subject to any externally imposed capital requirements.

The Board of Directors determine if and when dividends should be declared and paid based on all relevant circumstances, including the desirability of financing further growth of the Company and its financial position at the relevant time. The Board of Directors has adopted a policy to pay quarterly dividends, which commenced in 2012. Constellation intends to declare a regular quarterly dividend to allow shareholders to participate in its free cash flow, while retaining sufficient capital to invest in acquisitions and organic growth. There is no guarantee that dividends will continue to be declared and paid in the future.

The Company makes adjustments to its capital structure in light of general economic conditions, the risk characteristics of the underlying assets and the Company's working capital requirements. In order to maintain or adjust its capital structure, the Company, upon approval from its Board of Directors, may increase or decrease dividends, increase or decrease the line of credit or undertake other activities as deemed appropriate under the specific circumstances. The Board of Directors reviews and approves any material transactions not in the ordinary course of business, as well as significant acquisitions and other major investments above pre-determined quantitative thresholds.

21. Financial risk management and financial instruments

Overview

The Company is exposed to risks of varying degrees of significance which could affect its ability to achieve its strategic objectives for growth. The main objectives of the Company's risk management process are to ensure that risks are properly identified and that the capital base is adequate in relation to those risks. The principal financial risks to which the Company is exposed are described below.

Market risk

Market risk is the risk that changes in market prices, such as fluctuations in foreign exchange rates and interest rates, will affect the Company's income or the value of its financial instruments.

The Company is exposed to interest rate risk on the utilized portion of its CSI facility and its Debentures and does not currently hold any financial instruments that mitigate this risk. If there was a 1% increase in the interest rate on the Debentures, there would be a corresponding decrease in income before tax of \$2,249. There would be an equal and opposite impact if there was a 1% decrease in the interest rate.

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

The Company is also exposed to interest rate risk on the utilized portion of the New CNH Facility. If there was a 1% increase in the interest rate on the New CNH Facility, there would be a corresponding decrease in income before tax of \$1,006. There would be an equal and opposite impact if there was a 1% decrease in the interest rate.

The Company operates internationally, giving rise to exposure to market risks from changes in foreign exchange rates which impact sales and purchases that are denominated in a currency other than the respective functional currencies of certain of its subsidiaries. The Company currently does not typically use derivative instruments to hedge its exposure to those risks. Most of the Company's businesses are organized geographically so that many of its expenses are incurred in the same currency as its revenues thus mitigating some of its exposure to currency fluctuations.

Foreign currency sensitivity analysis:

Foreign currency risk arises on financial instruments that are denominated in a currency other than the functional currency in which they are measured. The Company's primary exposure with respect to foreign currencies is through the Canadian dollar denominated Debentures (note 11). The carrying value of the Debentures at December 31, 2017 is \$236,462 (C\$296,831) (December 31, 2016 - \$223,870 (C\$301,037)). If there was a 1% strengthening of the Canadian dollar against the U.S. dollar, there would be a corresponding decrease in income before tax of \$2,365. There would be an equal and opposite impact if there was a 1% weakening of the Canadian dollar against the U.S. dollar.

Liquidity risk

Liquidity risk is the risk that the Company is not able to meet its financial obligations as they fall due or can do so only at excessive cost. The Company manages liquidity risk through the management of its capital structure and financial leverage, as outlined in note 20 to the consolidated financial statements. The Company's growth is financed through a combination of cash flows from operations and borrowing under the CSI facility, New CNH Facility, TSS Membership Liability and Debentures. One of management's primary goals is to maintain an optimal level of liquidity through the active management of the assets and liabilities as well as the cash flows from operations. The details of the Company's CSI facility, New CNH facility, Debentures, and TSS membership liability are disclosed in note 10, note 11 and note 12 to the consolidated financial statements. As at December 31, 2017, available credit in respect of the Company's CSI facility was \$442,908.

The majority of the Company's financial liabilities recorded in accounts payable and accrued liabilities are due within 60 days. The Company also has payment processing liabilities which are settled within a few days of year-end. Included in cash is an equivalent cash balance of \$8,573 (December 31, 2016 - \$8,441) that is held to settle these payment processing liabilities as they become due. Holdbacks payable related to business acquisitions are generally due within six months to two years.

Given the Company's available liquid resources and credit capacity as compared to the timing of the payments of liabilities, management assesses the Company's liquidity risk to be low.

Credit risk

Credit risk represents the financial loss that the Company would experience if a counterparty to a financial instrument, in which the Company has an amount owing from the counterparty failed to meet its obligations in accordance with the terms and conditions of its contracts with the Company. The carrying amount of the Company's financial assets, including receivables from customers, represents the Company's maximum credit exposure.

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

The majority of the accounts receivable balance relates to maintenance invoices to customers that have a history of payment. In addition, a large proportion of the Company's accounts receivable are with public sector government agencies where the credit risk has historically been assessed to be low.

The maximum exposure to credit risk for accounts receivable at the reporting date by geographic region was:

		December 31, 2017	December 31, 2016
United States	\$	165,339	\$ 136,229
Canada	Ψ	26,770	21,910
United Kingdom		27,270	16,786
Europe		73,574	54,783
Other		23,585	13,846
	\$	316,538	\$ 243,554

The maximum exposure to credit risk for accounts receivable at the reporting date by reportable segment was:

	December 31, 2017	December 31, 2016
Public	218,194	164,765
Private	98,344	78,789
	\$ 316,538	\$ 243,554

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

The aging of accounts receivables at the reporting date was:

	December 31, D	December 31,
	2017	2016
Current		
Gross	253,417	189,402
Impairment	(1,589)	(618)
Net	251,828	188,784
90-180 days		
Gross	47,006	40,453
Impairment	(847)	(786)
Net	46,159	39,667
More than 180 days		
Gross	38,451	35,587
Impairment	(19,900)	(20,484)
Net	18,551	15,103
Total accounts receivable		
Gross	338,874	265,442
Impairment	(22,336)	(21,888)
Net	316,538	243,554

An allowance account for accounts receivable is used to record impairment losses unless the Company is satisfied that no recovery of the amount owing is possible; at which point the amounts are considered to be uncollectible and are written off against the specific accounts receivable amount attributable to a customer. The number of days outstanding of an individual receivable balance is the key indicator for determining whether an account is at risk of being impaired.

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

The movement in the allowance for impairment in respect of accounts receivable during the year ended:

		2017	2016
A conservation below to the form of the conservation of the conser	¢	21 000 ¢	22.469
Aggregate balance at January 1	\$	21,888 \$	22,468
Increase from business acquistions		1,860	879
Impairment loss recognized		18,722	12,444
Impairment loss reversed		(17,331)	(6,494)
Amounts written off		(6,005)	(7,033)
Other movements		3,202	(376)
Aggregate balance at December 31	\$	22,336 \$	21,888
Allowance for doubtful accounts arising from businss combinations	\$	4,241 \$	6,841

There is no concentration of credit risk because of the Company's diverse and disparate number of customers with individual receivables that are not significant to the Company on a consolidated basis. In addition, the Company typically requires up front deposits from customers to protect against credit risk.

The Company manages credit risk related to cash by maintaining the majority of the Company's bank accounts with Schedule 1 banks.

In the ordinary course of business, the Company and its subsidiaries have provided performance bonds and other guarantees for the completion of certain customer contracts. The Company has not experienced a loss to date and future losses are not anticipated; therefore, no liability has been recorded in the consolidated statements of financial position related to these types of indemnifications or guarantees at December 31, 2017.

Fair values versus carrying amounts

The carrying values of cash, accounts receivable, accounts payable, accrued liabilities, income taxes payable, the majority of acquisition holdbacks, CSI Facility and the New CNH Facility, approximate their fair values due to the short-term nature of these instruments. Bank debt is subject to market interest rates.

The Company has capitalized transaction costs associated with its CSI Facility and New CNH Facility. At December 31, 2017, the fair value and carrying value of the CSI Facility is \$nil (December 31, 2016: \$nil). As at December 31, 2017, the fair value of the New CNH Facility is \$98,227 and the carrying value is \$96,398. As at December 31, 2017, the fair value of the Debentures is \$266,478 and the carrying value is \$236,462. (December 31, 2016 – the fair value is \$243,514 and the carrying value is \$223,870).

As at December 31, 2016, the fair value of the CNH Facility is \$126,183 and the carrying value is \$122,697.

Reconciliation of cash flows from financing activities

The following table reconciles the changes in cash flows from financing activities for the CNH Facility, New CNH Facility, TSS Membership Liability, and Debentures:

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

		7	TSS Membership	
	New CNH Facility	CNH Facility	Liability	Debentures
Balance at January 1, 2017	-	122,697	72,937	223,870
Increase (decrease) in New CNH Facility, net	94,846	-	-	-
Repayments of CNH facility	-	(138,177)	-	-
Credit facility transaction costs	(1,942)	-	-	-
Total financing cash flow activities	92,904	(138,177)	-	-
Amortization of debt discounts and premiums	-	-	-	(3,249)
Amortization of debt related transaction costs	214	3,764	-	-
TSS membership liability revaluation charge	-	-	49,912	-
Foreign exchange loss (gain)	-	-	-	15,841
Foreign currency translation differences from foreign operations	3,280	11,716	12,942	-
Total financing non-cash activities	3,494	15,480	62,854	12,592
Balance at December 31, 2017	96,398	-	135,791	236,462

Fair value hierarchy

The table below analyzes financial instruments carried at fair value, by valuation method.

- level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;
- level 2 inputs are inputs other than quoted prices included in level 1 that are observable for the asset or liability either directly (i.e. prices) or indirectly (i.e. derived from prices); and
- level 3 inputs are inputs for the asset or liability that are not based on observable market data (i.e. unobservable inputs).

In the table below, the Company has segregated all financial assets and liabilities that are measured at fair value into the most appropriate level within the fair value hierarchy based on the inputs used to determine the fair value at the measurement date.

Financial assets and financial liabilities measured at fair value as at December 31, 2017 and December 31, 2016 in the financial statements are summarized below. The Company has no additional financial liabilities measured at fair value initially other than those recognized in connection with business combinations.

			De	ce mb	er 31	1, 2017	'				Dec	e mbe	r 31, 201	6
	Le	vel 1	Le	vel 2	Le	evel 3		Total	Le	evel 1	Le	vel 2	Level 3	Total
Assets:														
Available-for-sale equity securities	\$	-	\$	-	\$	-	\$	_	\$	4,236	\$	-	\$ -	\$ 4,236
. ,		-		-		-		-		4,236		-	-	4,236
Liabilities:														
Contingent consideration	\$	-	\$	-	\$	24,734	\$	24,734	\$	-	\$	-	\$15,538	\$15,538
Interest rate swap contract		-		-		-		-		-		503	-	503
		-		-	2	4,734		24,734		-		503	15,538	16,041

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

There were no transfers of fair value measurements between level 1, 2 and level 3 of the fair value hierarchy in the years ended December 31, 2017 and 2016.

The following table shows a reconciliation from the beginning balances to the ending balances for fair value measurements in Level 3 of the fair value hierarchy.

Balance at January 1, 2017	15,538
Increase from business acquisitions	7,406
Cash payments	(6,429)
Charges through profit or loss	6,817
Foreign exchange and other movements	1,402
Balance at December 31, 2017	24,734
Contingent consideration classified as current liabilities	12,328
Contingent consideration classified as other non-current liabilities	12,406

Estimates of the fair value of contingent consideration is performed by the Company on a quarterly basis. Key unobservable inputs include revenue growth rates and the discount rates applied (8% to 11%). The estimated fair value increases as the annual growth rate increases and as the discount rate decreases and vice versa.

22. Operating leases

The Company leases premises and certain equipment and automobiles under operating leases. The operating rental expense for the year ended December 31, 2017 was \$47,841 (2016 - \$42,255). The annual minimum lease commitments are as follows:

	December 31, 2017	December 31, 2016
Less than 1 year Between 1 and 5 years More than 5 years	\$ 69,362 144,732 34,394	\$ 59,541 113,500 30,333
Total	\$ 248,488	\$ 203,374

23. Operating segments

Segment information is presented in respect of the Company's business and geographical segments. The accounting policies of the segments are the same as those described in the significant accounting policies section of these consolidated financial statements.

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

Reportable segments

The Company has six operating segments, referred to as Operating Groups by the Company, being Volaris, Harris, TSS, Jonas, Perseus, and Vela. The operating segments are aggregated into two reportable segments in accordance with IFRS 8 Operating Segments. The Company's Public Sector segment develops and distributes software solutions primarily to government and government-related customers. The Company's Private Sector segment develops and distributes software solutions primarily to commercial customers.

The Operating Groups exhibit similar economic characteristics (such as gross and earnings before income tax and amortization ("EBITA") margins) and are substantially similar in relation to the nature of products and services, the nature of production processes, and the methods used to distribute product; however, the determination that the Company has two reportable segments is based primarily on the assessment that differences in economic cycles and procedures for securing contracts between our governmental clients and commercial, or private sector clients, are significant, thus warranting distinct segmented disclosures. Volaris, Harris and TSS have been aggregated into the Public Sector segment. Jonas, Perseus and Vela have been aggregated into the Private Sector segment.

Intercompany expenses (income) primarily represent Constellation head office management fees and intercompany interest charged on related borrowings to the reportable segments.

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Year ended December 31, 2017	Public Secto	r Private Sector	Other	Consolidated Total
Revenue	\$ 1,689,154	\$ 790,267	\$ -	\$ 2,479,421
Expenses				
Staff	837,369	394,286	5,219	1,236,874
Hardware	74,900	17,766	-	92,666
Third party licenses, maintenance and professional services	130,309	82,295	-	212,604
Occupancy	37,924	20,681	280	58,885
Travel	53,644	19,690	298	73,632
Telecommunications	13,201	8,684	64	21,949
Supplies	12,713	3,356	51	16,120
Software and equipment	33,278	9,080	578	42,936
Professional fees	21,266	8,389	1,656	31,311
Other, net	25,191	22,263	1,190	48,644
Depreciation	17,013	5,554	9	22,576
Amortization of intangible assets	161,189	69,305	-	230,494
	1,417,997	661,349	9,345	2,088,691
Foreign exchange (gain) loss	220	7,018	1,373	8,611
TSS membership liability revaluation charge	49,912	-	-	49,912
Equity in net (income) loss of equity investees	(369) -	-	(369)
Finance and other expense (income)	(479	(174)	(2,523)	(3,176)
Bargain purchase gain	(9,918) -	-	(9,918)
Finance costs	9,509	853	14,426	24,788
Intercompany expenses (income)	30,904	13,804	(44,708)	-
	79,779	21,501	(31,432)	69,848
Profit before income tax	191,378	107,417	22,087	320,882
Current income tax expense (recovery)	75,261	34,390	(3,175)	106,476
Deferred income tax expense (recovery)	(11,402	(593)	4,433	(7,562)
Income tax expense (recovery)	63,859	33,797	1,258	98,914
Net income	127,519	73,620	20,829	221,968

				Consolidated
December 31, 2017	Public Sector	Private Sector	Other	Total
Current assets	414,183	160,932	417,790	992,905
Current liabilities	832,381	316,456	23,304	1,172,141

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

Year ended December 31, 2016	Public Sector	Private Sector	Other	Consolidated Total
Teal chaca December 31, 2010	Tuone sector	Till are Sector	other	10141
Revenue	\$ 1,428,284	\$ 696,802	\$ -	\$ 2,125,086
Expenses				
Staff	708,426	346,545	4,018	1,058,989
Hardware	65,630	16,674	-	82,304
Third party licenses, maintenance and professional services	112,049	80,654	-	192,703
Occupancy	31,445	19,956	295	51,696
Travel	44,649	16,841	255	61,745
Telecommunications	13,232	8,381	61	21,674
Supplies	6,788	2,963	69	9,820
Software and equipment	29,259	7,098	190	36,547
Professional fees	19,559	5,749	2,941	28,249
Other, net	10,423	17,054	1,486	28,963
Depreciation	15,172	7,193	11	22,376
Amortization of intangible assets	124,877	65,697	-	190,574
	1,181,509	594,805	9,326	1,785,640
Foreign exchange (gain) loss	2,454	3	23,533	25,990
TSS membership liability revaluation charge	21,635	-	-	21,635
Equity in net (income) loss of equity investees	(304)	-	(5,013)	(5,317)
Finance income	(4,613)	(186)	(6,035)	(10,834)
Finance costs	6,447	892	14,234	21,573
Intercompany expenses (income)	35,401	15,422	(50,823)	-
	61,020	16,131	(24,104)	53,047
Profit before income tax	185,755	85,866	14,778	286,399
Current income tax expense (recovery)	53,622	29,639	1,682	84,943
Deferred income tax expense (recovery)	(41)	(2,986)	(2,301)	(5,328)
Income tax expense (recovery)	53,581	26,653	(619)	79,615
Net income	132,174	59,213	15,397	206,784

December 31, 2016	Public Sector	Private Sector	Other	Consolidated Total
Current assets Current liabilities	314,448	130,480	328,750	773,678
	586,712	264,327	22,125	873,164

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

Geographical segments

The public and private sector segments are managed on a worldwide basis, but operate in three principal geographical areas, Canada, USA, and UK/Europe.

In presenting information on the basis of geographical segments, segment revenue is based on the region in which the revenue is transacted and intellectual property is located. Segment assets are based on the geographic locations of the assets.

Year ended December 31, 2017	Canada		USA	UK/Europe	Other	Total
Revenue	\$ 308,659	\$	1,231,387	\$ 778,724	\$ 160,651	\$ 2,479,421
Non-current assets	268,223		349,795	571,302	105,993	1,295,313
Non-current assets						
Year ended December 31, 2016	Canada		USA	UK/Europe	Other	Total
	\$ Canada 252,508	\$	USA 1,114,821	\$ UK/Europe 643,147	\$ Other	\$ Total

Major customers

No customer represents revenue in excess of 5% of total revenue in both years ended December 31, 2017 and 2016.

24. Contingencies

In the normal course of operations, the Company is subject to litigation and claims from time to time. The Company may also be subject to lawsuits, investigations and other claims, including environmental, labour, income and sales tax, product, customer disputes and other matters. Management believes that adequate provisions have been recorded in the accounts where required. Although it is not always possible to estimate the extent of potential costs, if any, management believes that the ultimate resolution of such contingencies will not have a material adverse impact on the results of operations, financial position or liquidity of the Company.

25. Guarantees

- (a) In the ordinary course of business the Company and its subsidiaries have provided performance bonds and other guarantees for the completion of certain customer contracts. The total obligations of the Company pursuant to such bonds and related contingencies total \$70,424 (2016 \$46,932). No liability has been recorded in the consolidated financial statements.
- (b) As at December 31, 2017, in the normal course of business, the Company and its subsidiaries have outstanding letters of credit totalling \$17,092 (2016 \$18,263).

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

- (c) In the normal course of business, some of the Company's subsidiaries entered into lease agreements for facilities. As the joint lessees, the subsidiaries agree to indemnify the lessor for liabilities that may arise from the use of the leased facility. The maximum amount potentially payable under the foregoing indemnity cannot be reasonably estimated. The subsidiaries have liability insurance that relates to the indemnifications.
- (d) The Company and its subsidiaries have provided routine indemnifications to some of its customers against liability if the Company's product infringes on a third party's intellectual property rights. The maximum exposure from the indemnifications cannot be reasonably estimated.

26. Changes in non-cash operating working capital

	Year ende	ed
	December	31,
	2017	2016
Decrease (increase) in accounts receivable	\$ (17,984) \$	2,605
Decrease (increase) in work in progress	4,953	3,874
Decrease (increase) in other current assets	(22,719)	(3,132)
Decrease (increase) in inventory	3,096	4,843
Decrease (increase) in non-current assets	2,005	583
Increase (decrease) in other non-current liabilities	(7,202)	(2,986)
Increase (decrease) in accounts payable and accrued liabilities,		
excluding holdbacks from acquisitions	32,206	(4,068)
Increase (decrease) in deferred revenue	(11,162)	(17,766)
Increase (decrease) in provisions	1,658	(449)
Change in non-cash operating working capital	\$ (15,149) \$	(16,496)

Notes to Consolidated Financial Statements (In thousands of U.S. dollars, except per share amounts and as otherwise indicated) Years ended December 31, 2017 and 2016

27. Related parties

Key management personnel compensation

The key management personnel of the Company, inclusive of the operating segments, are the members of the Company's executive management team at the Company operating segments and head office and Board of Directors.

	Years ended December 31, 2017 2016	
Salaries, bonus and employee benefits	\$ 10,853 \$	10,746
Total	\$ 10,853 \$	10,746

There were no significant post-employment benefits, other long-term benefits, or share-based payments attributed to the key management personnel in 2017 and 2016.

28. Subsequent events

On February 14, 2018, the Company declared a \$1.00 per share dividend that is payable on April 5, 2018 to all common shareholders of record at close of business on March 16, 2018.

Subsequent to December 31, 2017, the Company completed a number of acquisitions for aggregate cash consideration of \$278,427 on closing plus cash holdbacks of \$40,942 and contingent consideration with an estimated fair value of \$1,121 for total consideration of \$320,490. The business acquisitions include companies catering primarily to the communications, local government, retail management and distribution, healthcare, insurance, fitness, marine asset management, financial services, oil and gas, real estate brokers and agents, pulp and paper manufacturers, small and medium sized businesses, public housing authorities and fashion retail and are all software companies similar to the existing business of the Company.